

PEDAGOGY FOR READING IN RURAL ALASKA: THE EFFECT OF
CULTURALLY RELEVANT READING MATERIALS ON STUDENT READING
ACHIEVEMENT IN CHEVAK, ALASKA

By

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ABSTRACT

This study used Culturally Relevant Reading materials (CRRM) with a proprietary, culturally relevant pedagogy for Reading. It was focused on results in Reading Achievement, both reading fluency and comprehension, involving 7th and 8th grade students in a twelve (12)-week program of Reading Language Arts. It was an exploratory sequential mixed methods study using a quasi-experimental design, with two student groups, A and B, experimental and control respectively. The results are situated within cultural expert views of Native perspectives on reading from the community as well as student surveys on motivation.

Results from the study indicate that student achievement in Reading using the CRRM program, as measured by standardized tests, namely Edformation's AIMSweb® (2002) tests of both R-CBM and MAZE, met with similar results in student Reading achievement using a Western curricular program. Both control and experimental groups in the quasi-experimental, exploratory sequential mixed methods study showed significant growth in Reading achievement in both fluency and comprehension, on standardized tests over a 12-week interval.

Results from the study showed students in the CRRM program showed no significantly greater growth in reading comprehension or fluency during the study, as measured by AIMSweb® tests of MAZE and R-CBM. Student survey results showed increases in student motivation to read, enjoyment of reading class, and desire to read CRRM. Written questionnaires from community members outlined criteria for student success in reading.

The results indicate that Alaska Native culturally relevant materials and teaching techniques can be used interchangeably with Western curricular materials in Alaska Native village schools with expectation of similar success in student Reading achievement. Students are eager to have CRRM in Language Arts classes, and the community is encouraged by the promising results.

Dedication Page

This thesis is dedicated to my father, the late George Parker Geiges, who felt strongly that education was the way to a better future.

Table of Contents

	Page
Title Page	i
Abstract	iii
Dedication Page	v
Table of Contents	vii
List of Figures	xi
List of Tables	xiii
List of Appendices	xv
Acknowledgments	xvii
Chapter 1	1
1.1 The Research Study	1
1.2 Statement of Research Intent and Research Questions	4
1.3 The Timing of the Study	5
1.4 Statement of the Problem	6
1.5 Potential Benefits of the Proposed Research	9
1.6 Rationale for the Study	11
1.7 An Action Research Project in a Middle School Classroom	15
1.8 Changing Times and Timeless Epistemologies	17
Chapter 2	25
2.1 Literature Review	25
2.2 Overview and Rationale	25
2.3 Review of Relevant Literature	30
2.3.1 Historical Contexts of Education for Alaska Native/American Indian Peoples	30

2.3.2 Critical Literacy.....	31
2.3.3. Critical Pedagogy	32
2.3.4. Indigenous Pedagogy	34
2.3.5. Pedagogy for Reading Comprehension.....	36
2.3.6. Transmediation.....	38
2.3.7 Summary/Conclusion	39
Chapter 3	41
3.1 Research Methodology	41
3.1.1 Purpose.....	41
3.1.2 The Intervention: CRRM Program	44
3.1.3 Study Participants	47
3.1.4 The Researcher in Context.....	52
3.1.5 Study Timeline.....	53
3.1.6 Data Collection	54
3.1.7 Data Analysis Techniques.....	57
3.1.8 Ethics.....	57
Chapter 4	63
4.1 Results	63
4.2 Summary of the Data	64
4.3 Distribution of Data: AIMSweb® MAZE Test of Reading Comprehension	65
4.4 Distribution of Data: AIMSweb® R-CBM Test of Reading Fluency Growth	67
4.5 Student Growth in Reading Skills.....	68
4.6 AIMSweb® MAZE Data Analysis for All Students.....	68
4.7 AIMSweb® R-CBM Data Analysis for All Students	70

4.8 Student Surveys and Study Effects	71
4.9 Tally of Data from Pre- and Post-Study Student Surveys and Resulting Bar Graphs	71
4.10 Tabulation of Survey Results	72
4.11 Written Interviews from Local Cultural Experts (LCEs).....	75
Chapter 5	79
5.1 Conclusions and Implications for The Future.....	79
5.1.1 Conclusions.....	79
5.1.2 Implications for The Future	81
5.3 References.....	87
Appendices.....	93

List of Figures

	Page
Figure 1: Distribution of AIMSweb® MAZE Growth Experimental Data	64
Figure 2: Distribution of AIMSweb® MAZE Growth Control Data	65
Figure 3: Histogram to Show Distribution of AIMSweb® R-CBM Growth Experimental Data	66
Figure 4: Histogram to Show Distribution of AIMSweb® R-CBM Growth Control Data	66
Figure 5: Histogram of Pre-Test AIMSweb® MAZE Data for All Students	67
Figure 6: Histogram of Post-Test AIMSweb® MAZE Data for All Students	68
Figure 7: Distribution of Pre-Test AIMSweb® R-CBM Data for All Students	69
Figure 8: Distribution of Post-Test AIMSweb® R-CBM Data for All Students	69
Figure A.1: Letter of Approval from University of Fairbanks Institutional Review Board	93
Figure B.1: Pre-Study Student Survey	95
Figure B.2: Post-Study Student Survey	96
Figure C.1: An Example of Student Storyknifing	97
Figure D.1: Five Questions for Class Discussion	99
Figure E.1: Fictitious Example of a Student Paragraph	101
Figure F.1: Bar Graph of Responses to Pre-and Post-Study Survey Question #1 – I enjoy reading class.	103
Figure F.2: Bar Graph of Responses to Pre-and Post-Study Survey Question #2 – I am motivated to take a reading class in school.	103
Figure F.3: Bar Graph of Responses to Pre-and Post-Study Survey Question #3 – I like the subject matter of the stories we read in class.	104
Figure F.4: Bar Graph of Responses to Pre-and Post-Study Survey Questions #4 – I want to read at home after school	104
Figure F.5: Bar Graph of Responses to Pre-and Post-Study Survey Question #5 – The Cup’ik culture (is/should be) part of our reading class.	105
Figure G.1: Questions on the Written Interview for Local Cultural Experts	107

Figure H.1: Coding Scheme For Data Collected From CRRM Research Project.....	109
Figure I.1: Cup'ik Cultural Values From Alaska Native Knowledge Network	111
Figure J.1: Permission To Use Copyright: Pearson.....	113
Figure J.2: Permission To Use Copyright: Pearson.....	114
Figure J.3: Permission To Use Copyright: <i>Alaska Quarterly Review</i>	115
Figure J.4: Permission To Use Copyright: Fejes Family	116
Figure J.5: Permission To Use Copyright: Chevak Traditional Council	117

List of Tables

	Page
Table 1: Summary of the Participants in the Study	64
Table 2: Results of <i>t</i> -test AIMSweb® MAZE Growth	65
Table 3: Results of the <i>t</i> -test for AIMSweb® R-CBM Growth	67
Table 4: Results of <i>t</i> -test for Pre- and Post-Study AIMSweb® MAZE scores for All Students ...	68
Table 5: Results of <i>t</i> -test for AIMS AIMSweb® R-CBM test scores	70
Table 6: Tabulation of Results of Pre- and Post-Study Student Survey Responses to Question #1 – I enjoy reading class.	71
Table 7: Tabulation of Results of Pre- and Post-Study Student Survey Responses to Question #2 – I am motivated to take a reading class in school	71
Table 8: Tabulation of Results of Pre- and Post-Study Student Survey Responses to Question #3- I like the subject matter of the stories we read in class	72
Table 9: Tabulation of Results of Pre- and Post-Study Student Survey Responses to Question #4 – I want to read at home after school.	72
Table 10: Tabulation of Results of Pre- and Post-Study Student Survey Responses to Question #5 – The Cup’ik culture is part of our reading class (Pre-Study) and The Cup’ik culture should be a greater part of our reading class (Post-Study)	72

List of Appendices

	Page
Appendix A: Letter of Approval from University of Fairbanks' Institutional Review Board	93
Appendix B: Pre- and Post-Study Student Surveys	95
Appendix C: An Example of Student Storyknifing.....	97
Appendix D: Five Questions for Class Discussion.....	99
Appendix E: Fictitious Example of A Student Paragraph	101
Appendix F: Bar Graphs of Responses	103
Appendix G: Questions on the Written Interview For Local Cultural Experts	107
Appendix H: Coding Scheme For Data Collected From CRRM Research Project.....	109
Appendix I: Cup'ik Cultural Values From Alaska Native Knowledge Network	111
Appendix J: Permissions To Use Copyrights	113

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Chapter 1

The Research Study

Although large sums are spent each year by school districts to equip schools with packaged commercial programs to teach elementary students to read, not all materials are effective within Alaska Native communities. In fact, a review of historical data on reading achievement has shown the opposite to be the case (Alaska Department of Education and Early Development (AKDEED), 2013). This begs the question, why do we, as educators in public schools, continue along the same path? In my view, schools need to be equipped to teach reading with more effective pedagogical techniques. My study tests a novel technique that may do exactly that. I assert that in schools with more effective pedagogies for learning, students will be more motivated to read, will potentially read more, and will comprehend more of what they read. The results of my study may suggest possible future research projects that focus on how reading is being taught in Native villages throughout Alaska. The effectiveness could be determined by an examination of reading pedagogy with student motivation and standardized test scores at various grade levels. In this way, new policy could be suggested and tested for more powerful ways to motivate students to read more and to understand what they read.

Culturally Relevant Reading Material (CRRM), a way to teach reading comprehension, is a project of my own design, one that synthesizes Alaska Native and Western concepts of pedagogy and methodology. It is an effort to decolonize systems of teaching, an effort consistent with those of Indigenous peoples worldwide (Smith, 2012). CRRM is a project that relates Yup'ik epistemologies (e.g., storytelling, storyknifing) with Western methodologies (e.g., Guided Readings and re-telling) with use of transmediation technique (e.g., Apple MacBook software) to bring Native concepts of learning into a format that is recognizable and acceptable

to the reality of an imposing Western construct. In CRRM, I establish a “culturally sustaining pedagogy” (Paris, 2012, p. 96) that will serve to bolster the richness of a pluralistic society.

The project of CRRM will approach the concept of teaching Alaska Native students to learn to read with understanding. This would be reflected in improved scores on standardized State tests, a phenomenon long overdue among Alaska Native students. My research question centers around the effects of CRRM on student reading fluency and comprehension scores in an Alaska Native village school.

When I searched for new ways of teaching and learning that would complement Indigenous ways, the daily experience of information processing reminded me of the Inuit qargi I personally experienced at Point Hope, Alaska, in 2006 and the daily meeting of men who gather to exchange news in the round, centrally located structure. As I continue to search for synchronous pedagogies from both cultures, I find this oral tradition - trading news and storytelling, similar to classroom Read Alouds from the Western tradition. The Yup'ik traditional storyknifing is akin to our re-telling of stories for others to know them. As John (2010) explains, ...”The children learned to *yaarnuiq* (storyknife) with handmade ivory, wooden, or metal knives”... (p. 4). This Native method of recording stories involved girl children who, accompanied by an observer, carved figures into the ground, sand, mud, or snow, with the handmade knife. From the images carved by the girls, their contemporaries would learn the content of the stories from the recorded concept imagery on the ground. Interestingly, this establishment of a neurological pathway for concept imagery to be established and nurtured, in the minds of the girls, must certainly have paved the way for good comprehension of story content. In this way, folk tales that were indigenous to the tribe were disseminated. Female children traditionally used the storyknives, and male children did not.

The oral discussion of information is a commonality that perhaps has not been fully

utilized in today's classrooms, where conversation has been replaced with written worksheets that have questions to answer at the close of reading assignments. Gambrell & Bales, (1986) Gambrell & Javitz, (1993) Ketch, (2005) Palincsar & Brown, (1985) Pressley, (1977) and Sadoski & Paivio, (2013) report on the use of imagery in attempts to improve student reading comprehension. Sencibaugh professes (2005) auditory language restatements, Sadoski & Paivio (2013) assert dual coding theory, and Johnson-Glenberg (2005) verbal and visual strategies. All of these techniques touch on the notion of novel approaches to processing of written information by readers. My CRRM pedagogy encompasses a variety of modalities that include the use of imagery, a written re-telling with Apple computer software, oral discussion to restate the meaning of the text, and Guided Reading as the form of delivery for the information. In my research project, I have designed a programmatic way of teaching reading that combines several techniques that have proved successful in the effort to close any reading achievement gap between Alaska Native and non-Native students. Alaska Native students, as a unique subset of American children, have not historically been exposed to an orthographic, Western way of information transfer, i.e., the written word. Rather, their culture has an oral tradition of storytelling, with some methods for record making, i.e., storyknifing (John, 2010) or petroglyphs. DeStefano (1973) tells us that, in a culture where storytelling is oral, reading may not be considered important but marginal. An approach that amalgamates antithetical traditions of knowledge transmission in Western and Alaska Native cultures may be an alternative that proves more palatable to Native tastes and more decodable to Western provinces. That being said, the reality of standardized testing, an inalienable requisite of contemporary political educational agenda, imposes strict judgment on academic achievement by Alaska Native students via official education departments of the State of Alaska. The effect of CRRM pedagogy on the academic achievement of Alaska Native school children will be measured in

this study in terms of a standardized testing instrument routinely used in the school, that is, AIMSweb®'s Maze Curriculum-Based Measurement (MAZE) Test of Reading Comprehension and AIMSweb®'s Reading Curriculum-Based Measurement (R-CBM) Test of Reading Fluency (Shinn & Shinn, 2002). The MAZE test is a 3-minute timed test, where students select an answer from three choices to fill in blanks in sentences. The R-CBM test is a 1-minute timed test of student reading fluency, that is, it measures the number of words per minute the student reads correctly (Shinn & Shinn, 2002).

Statement of Research Intent and Research Questions

My study examines one aspect of the Western educational construct of schooling, that is, pedagogy for reading comprehension, to find a way for Native children to be taught to read to higher levels of proficiency as they mature within the contemporary realities of statewide testing in public schools. More precisely, I conducted research on the effects of a proprietary pedagogy for teaching reading comprehension, one that included Guided Readings, development of concept imagery in group discussion, a written exercise that includes drawings and/or diagrams where students retell stories via storyknifing technique, and the technology component of typing story summaries on Word software on Apple MacBook laptop computers. I examine the effects of student performance on the Academic Improvement Monitoring System (AIMSweb®) tests in both reading comprehension and reading fluency (Shinn & Shinn, 2002). It is an exploratory sequential mixed methods study using a quasi-experimental design, with two student groups, Group A as the experimental group and Group B as the control group.

Historically, Alaska Native students have scored approximately half as well as non-Native students (AKDEED, 2013). The research questions are: 1) What effect did the Culturally Relevant Reading (CRRM) program have on student reading fluency, as measured by AIMSweb® R-CBM test? 2) What effect did the CRRM program have on student reading

comprehension, as measured by the AIMSweb® MAZE test? 3) How did reading class influence students attitudes toward reading? And, 4) How do the local Cup'ik community experts envision reading being taught in Alaska Native schools in an ideal way? This study tested an alternative pedagogy for teaching reading that has the potential to help close the achievement gap between Alaska Native and non-Native students on State mandated tests in Reading. Improved literacy skills will contribute to the cultural practices, community wellbeing and quality of life of the Alaska Native community in that students will ultimately better understand what they read. As cultural practices are dynamic and always in flux, new literacy practices would change the ways Alaska Native peoples communicate and disseminate information. For example, as customs such as qargi meetings fade away, new skills from transmediation will help a culture to become more connected to a worldview that is much different from their own. This enhanced view of the world would undoubtedly lead to adaptation of new ways of doing things in conjunction with old ways. Enhancement of literacy skills will support long-term transformation efforts of Alaska Native villages to become sustainable communities that combine ancient Native customs with a vital contemporary American citizenship. One of the goals of my research is that, CRRM may offer an alternative way to improve student reading comprehension that is holistic, research-validated, psychoactively dynamic and effective in improving student reading achievement.

The Timing of the Study

The study was conducted over the course of one semester within the school year. As a teacher in a Middle School classroom at an Alaska Native village school, I conducted action research within my classroom at Chevak School in Chevak, Alaska. A timed study, my research included a series of stories that were presented to students in direct instruction as part of the study methodology over the course of the semester. Data were collected before the start of the CRRM program, at intervals throughout the program of study, and at the end of the study. A

standardized testing instrument, the AIMSweb® MAZE Test of Reading Comprehension measured student understanding of what they read. Students read and responded to stories presented according to the methodology set out for my research. At the end of the semester, the scores from student tests taken before the study were compared to student test scores taken after the study.

Statement of the Problem

One problem faced by approximately half of Alaska's student population, is that their achievement in reading performance, as measured by State standardized test scores, portrays them as deficient in reading skills, and not proficient readers by their home State of Alaska. In public schools, Alaska Native students are subject to mandatory standards-based State testing. Over the last thirty years or more, half of the student population has performed below proficiency (AKDEED, 2013). As educators privileged with research-validated methods at our disposal, we must apply our knowledge and experience to find pedagogy for teaching reading within the Alaska Native context that will effectively teach children to read proficiently. Among the many methods available, most Alaska Native schools use commercially prepared programs from Western sources. With the current trend toward decolonization and abandonment of Western-style curricula in favor of culture- and place-based curricula for Native children, my study explores the effect of CRRM, a unique programmed pedagogy, on Alaska Native student achievement in reading comprehension. The program is multisensory and works to develop the cognitive process of concept imagery in learners with reading difficulties within a framework that is not foreign to Alaska Native students.

As a teacher in a rural Alaska Native school, I find students in the position of having a reading score deficit, one that labels them as inferior to and incapable of achieving academically as well as their non-Native contemporaries. A new way to teach them to understand what they

read will give my students the skills they need to read and better answer questions on standardized tests in reading. My study has the potential to initiate a new and more effective way for teachers to teach reading for the benefit of Alaska Native students that uses culturally relevant materials. In particular, Alaska Native students would benefit from higher scores in reading on Alaska State tests of academic achievement, as they historically lag behind non-Native students. This gives the impression that they do not learn as well or as much as non-Native students, and puts their school districts at a disadvantage.

In Myra Dunn's meta-analysis of culturally relevant pedagogy (2001), cultural differences of Aboriginal Australian students are noted. For these students, learning is similar to Alaska Native ways of knowing. In contrast, their Western colonizer counterparts have a learning style that is organized into a progression of linear steps similar to the existing Western programs here in Alaskan public schools. And, the study purports that all children, regardless of cultural background, are capable of learning to adequate levels in school. It is up to us as educators to answer the question Dunn (2001) poses:

What can be done to give children from all types of family background a more equal opportunity at school? (p. 679)

It is in this type of environment that my study is situated, with an Alaska Native population, which has historically achieved to a lesser degree than has the colonizer population on standardized tests for Reading. This problem is not endemic to Alaska Native communities, but is found worldwide in Indigenous populations. Dunn (2001) suggests that:

...The important issues that concern literacy development for children of cultural minorities...are likely to be the mode of delivery of literacy education and whether it fits the preferred style of literacy learning. (p. 684)

To address Dunn's 'mode of delivery' of literacy education, my research project presents an

alternative way to teach reading comprehension in public school classrooms.

Native children today need to learn subsistence skills as well as reading skills, as Alaska Department of Fish and Game (ADF&G) reveals:

The subsistence priority exists to preserve the rich cultural heritages of rural Alaska. (1989, p. 53)

The Western lifestyle, with its technological advances, jobs, and cosmopolitan travel plays an equally important role in the lives of today's Alaska Native youth. They face a future where traditional Native and Western educational processes may or may not blend together in a "systemic integration" as described by Barnhardt & Kawagley (2011, p. xv).

The ADF&G (1989) acknowledges

... Subsistence has long played an essential role in Alaska's economy.

Most Alaskans recognize this, and continue to support a legal system, which does likewise (p. 17).

Native children need reading skills to survive in the modern world. As Arctic Research Consortium of the United States (ARCUS) (1997) states...

Work modeling the effects of rapid change in arctic societies over the last century has shown that arctic residents increasingly combine elements of traditional cultures with the educational and employment opportunities that are found both at home and elsewhere. (p. 2)

Alaska Natives realize, in a corollary way, that reading is a skill that is just as essential to existence in their modern world as are subsistence skills and that their children need to learn to read as well as possible in school. Ilutsik (1999), Mather (1995), Okakok (1989), and Ongtooguk (2000)

are other Alaska writers who have voiced similar goals for Alaska Native children in terms of Western education.

Mandatory standardized testing is a fact of life in U.S. public schools. The State of Alaska tests children for their ability to read and comprehend beginning in the third grade. Scores are published for public school districts annually and indicate students who can read at a pre-set level of proficiency and those who cannot. Alaska Native children are subject to the testing along with non-Native children. Students and their school districts are judged by their performance on standardized tests. My research project attempts to give rural students a better chance at being prepared for these tests, to follow the tenet of the Alaska Rural System Initiative (AKRSI):

...to implement a set of school reform initiatives that systematically documented the indigenous knowledge systems of Alaska Native people and developed pedagogical practices and school curricula that incorporated indigenous knowledge and ways of knowing into the formal education system.

(Barnhardt & Kawagley, 2011, p. xi)

Potential Benefits of the Proposed Research

To reiterate, the questions addressed by my research include: 1) How did the CRRM program affect the reading achievement of Alaska Native students at Chevak School? 2) How did the CRRM program change reading comprehension test scores for students who receive the instruction? And, 3) Did use of this program lead to increased motivation and interest among students in their reading classes? Some related sub-questions include: 1) How do these materials and pedagogical methods fit within the cultural context of the student population? 2) Did the CRRM program help Alaska Native students better ‘envision the scenes of a narrative,’ as Vizenor (1999) suggests is their inherent ability?

My research project is CRRM, pedagogy of my own design to teach reading. It uses

culturally relevant methods and literature and new technology. I conducted a review and synopsis of existing literature related to the dominant idea, subject, principle and practice associated with teaching reading in rural Alaska, that is, to Alaska Native students at Chevak School in Chevak, Alaska. CRRM, a pedagogy for teaching reading, is a proprietary, eclectic mix of methods from both Alaska Native and Western-influenced pedagogies. My project adds to the current body of research in that it attempts to find a way to teach students to better understand what they read. In this way, students will be better prepared to score higher on tests of reading as well as to perform better in school classrooms. In addition, students may find more interest in reading, and may be more motivated to retain the information they have learned in school.

My work will have significance for a diversity of people, with plans for new studies, and with outcomes that will benefit students. This report will connect with themes found in the relevant literature to my study. I will explain how my research project will be meaningful, relevant, and empowering to Alaska Native students. New technologies will be used in middle school classrooms, new methods for teaching reading will be implemented in Alaska Native village classrooms, new relationships in communities will be forged, and new possibilities to improve student academic achievement in reading were tested.

Literacy enhancement among village youth has the potential to affect the village community in many positive ways. An increased level of proficiency will reflect well on the Alaska Native community in which it is located. State and federal funding sources would most likely view it in a favorable light, as would future employers and institutions of higher learning. The value of better performance on tests is of inestimable value to the students themselves, in terms of self-esteem, pride of accomplishment, recognition of personal goals, and the confidence that success brings to the reality of contemporary life within an Alaska Native village today.

My research contributes to the cultural practices and quality of life for Native peoples in rural Alaska in that it attempts to discover what works in teaching rural children to read to a level of proficiency as determined by State of Alaska standards. The study results will be disseminated to rural locations to provide illustrative examples of one way to teach reading that uses culturally relevant materials. In this way, rural Native children will be helped to be more proficient in reading, when trained with pedagogy for reading that helps them to better understand what they read. In the long term, this will improve the profile of student academic performance among Alaska Native school districts. Alaska Native students will be able to perform at the same levels of achievement as non-Native students in the state. No longer will there be an achievement gap in student academic performance, and no longer will Alaska Native students be viewed as inferior to non-Native students.

Alaska Native school districts reveal scores from at least thirty years of standardized tests of Reading Comprehension that are almost half that of non-Native students. (McDowell, 2006) To me, as a teacher trained in remedial reading technique, the conundrum in this scene is that an overlay of Western commercialized pedagogical programs onto a rich and systemic tradition of Alaska Native epistemology is a mismatch. Curricular materials and programs that teach reading need to be enriched, in Alaska Native, and very possibly in non-Native schools, so that students can improve their understanding of what they read.

Rationale for the Study

Fillmore & Snow (2000) reveal a “rather frantic search” for information (p. 34) for better ways to teach reading among bilingual educators on a national scale. As I survey the range of remedial reading programs and strategies available to me as a reading teacher, the options are many. The questioning, dramatic acting out, graphic organizers, note-taking, outlining, and metacognitive techniques for teaching students to read for comprehension are many, however, I

question which one might work best here in rural Alaska. As a teacher, I want to present information to students in a way that will be understood and enjoyed, may become second nature, and one that can be easily accessed to check for understanding.

There is much that needs to be done to better prepare students for success in an ever-changing world and to meet the realities of standardized testing that remains a reality. There is much that can be done to find new and better ways to teach Alaska Native children to read more effectively, as Freire's 'reading the world,' or conscientization, postulates. (2005) A review of relevant literature reveals that more work on the topic would be relevant to the issues of the contemporary political agenda for education. It would satisfy the call for more information on culturally relevant pedagogies that is emerging in present day school districts. It would inform policy for the mandate of professional development agenda for teachers or curriculum design in schools. Further research would definitely be a natural progression, as educational administrators and government personnel demand data to prove program effectiveness.

In the absence of an effective pedagogy for teaching reading comprehension, Alaska Native students have shown less than proficient performance on Alaska state standardized tests for reading comprehension. Even though that success may be multi-faceted and acknowledged in many different ways by Alaska Native communities, the reality of compulsory standardized testing remains in contemporary life. Hence, my CRRM is a reaction, from my review of thirty years of data, from my experience teaching Alaska Native students with Western materials and pedagogies, and from my study of the ways Native peoples process knowledge through generations of learning. When I consider what sociocultural learning theory can provide as I proceed, I understand that my students' daily experience is a rich source of information (Vygotsky, 1976). Gonzalez, Moll, & Amanti (2009) further support the value of cultural knowledge possessed by Alaska Native students in their "funds of knowledge" theory.

The Castagno & Brayboy (2009) review of the literature tells us much about culturally responsive schooling among Indigenous students. Some of their findings support my study, in that they found culturally relevant learning demands change in the present ways. They found an explicit focus on Indigenous epistemologies, a shift in pedagogies, and an effective teacher preparation all necessary parts of school improvement. The study found that components of belief systems that have remained stable over time serve as an anchor for changing cultures, and that the use of Native culture could be supportive for pedagogy. New pedagogies, according to Castagno & Brayboy (2009) will improve learning, must turn teacher sentiment around with new preparation and acceptance of cultural standards in their teaching, and, in turn teachers will serve as the beginnings of transformative new curricula. Castagno & Brayboy's meta-analysis underscored the fact that culture is rooted to place, and that schooling for Indigenous students requires a shift in pedagogies for culture that is inherently fluid and changing over time yet can simultaneously serve as an anchor for Indigenous youth in schools. The meta-analysis supported my work as a transformative new design towards a pedagogy that may better serve Indigenous students as they learn to read. More than that, the teaching of reading comprehension needs a deeper connection with Native ways of learning. In the literature from Alaska Natives, I find special moments of time when adults gathered young folks around them to transmit information, in part with auditory messages, in part with demonstration of technique in a master-apprentice spatially kinesthetic mode and in part to allow their students to practice what is being demonstrated. Grabe (2004) asserts that culturally relevant text allows readers to better comprehend what they read, an assertion that leads me to include Alaska Native stories in my research project.

Over the years, the Alaska Native worldview has changed. What was part of a Yupiaq worldview during the early days of the last generation i.e., the Elders, may not be as much as part

of their view of today. Views of life in various regions of Alaska are for the most part, very different today than they were a generation ago. For example, Kawagley quotes Mary Muktoiyuk (1988), who said:

These days, they no longer live in a good way, for they are no longer as they used to be...In these times, though people seem to have stopped doing things in the old way. Now what was is no more. You no longer see people like those who lived then. (Kawagley, 2006, p. 12)

Kawagley (2006) describes the contrast between a Yupiaq worldview and the worldview that has been imposed on them by historical Western contact. The clash of cultures brought on by the invasion of European peoples brought changes to the modern Yup'ik culture. These changes that are in direct 'contrast' with traditional ways, as Muktoiyuk said, 'people seem to have stopped doing things in the old way.' This has led to modern tensions and dissatisfaction in Alaska Native communities across the state. Undoubtedly, it is this 'contrast' that has mandated for change in Alaska Native communities. It is the 'contrast' of cultural ways of knowing, teaching, and being that has prompted the efforts of decolonization in Native villages in Alaska and elsewhere around the globe. It is this 'contrast' that drives village Elders to pass on their ways of knowledge to their young people, before their Native ways are lost forever.

For the future, life for Alaska Natives remains divided between different cultures, and yet, there is hope for a future as a blended whole of worldwide people who have experienced tragedy and have endured. Young Indigenous administrators now relish their jobs as they restructure their schools' textbooks, curricula, district hierarchies, and operational procedures. There is a renewed sense of pride, self-esteem, acceptance of cultural heritage in the face of a diverse world, even public statements, such as Cajete's (2011) "rise of the Indigenous mind" (oral presentation) proclamation that suggests that knowledge from Indigenous systems finally

appears to have value for Western folk who need to learn practices of sustainability. The Western world has much to learn from ancient cultures, where self-reliance, cultivation of subsistence-produced foodstuffs, and healthy interdependency with Native land is woven together with strong spiritual awareness and dependence on a humanitarian philosophy. In my view, my work with CRRM as pedagogy for reading comprehension, conducted within an Alaska Native community, blends the power of reading remediation with student cognition and technological transmediation to improve students' understanding of what they read.

An Action Research Project in a Middle School Classroom

I conducted action research within my four (4) middle school classrooms of Alaska Native students. The data were collected within an experimental design, with pre-test and post-test assessments. The students were members of the seventh and eighth grade classes, a group of thirty-seven (37) students. The pre-test was given at the study outset, in January of the 2016 school year, when the AIMSweb® MAZE Test of Reading Comprehension and AIMSweb® R-CBM Test of Reading Fluency Winter Benchmark Tests were given (Shinn & Shinn, 2002). The post-test was given at the end of the study, in May of the 2016 school year, when the AIMSweb® MAZE Test of Reading Comprehension and AIMSweb® R-CBM Test of Reading Fluency Spring Benchmark Tests were given (Shinn & Shinn, 2002). Post-tests were given on a monthly follow up basis, in the form of AIMSweb® MAZE Test of Reading Comprehension and AIMSweb® R-CBM Test of Reading Fluency Progress Monitor Tests (Shinn & Shinn, 2002). In a qualitative vein, students completed surveys on the research process that indicates both their motivation and interest level in reading as a classroom activity for learning. Forty-five (45) minutes of instruction with CRRM were given to the study's experimental participants daily. In contrast, forty-five (45) minutes of instruction with traditional worksheet handouts were given to the study's control group of students. Statistical analysis looked for significant growth in student

reading achievement in both comprehension and fluency over the course of the semester.

To contemplate a design for a novel way of teaching Alaska Native students to learn Western style concepts, I look to the guidelines established by Alaska Native peoples for culturally responsive teaching. I find that CRRM must include values that are important to Native peoples. For instance, the Alaska Native Values for Curriculum, published by the Alaska Native Knowledge Network (ANKN), holds the values of respect for others, having patience, and seeing connections among all of the values. I chose these three because I believe it is important that I include these in CRRM, when I define to students how CRRM will operate. All study participants must respect the opinions of others, must allow each person to share their special gifts, must have patience when the going is hard, and, must remain open to see interconnections with all things. In this way, students may improve reading achievement as well as satisfy Native values. As a Yup'ik Elder once said, for her there were four ways of learning that she lived by “as a child, by doing, by hearing, by seeing, and by doing what she was told” (Personal communication, 2012). Kawagley (1995) discusses Yupiaq ways of knowing:

The circle [of life] brings all into one mind. In the Yupiaq thought world, everything of Mother Earth possesses a spirit. This spirit is consciousness, awareness. So the wind, river, rabbit, amoeba, star, lily, and so forth possess a spirit. The human consciousness with its ability to merge into one with all consciousnesses of this world produces the holotropic mind. The holistic mind is given to the nurturance of health, and an environmental ethic. (p. 4)

In Kawagley's (1995) way, this “nature power,” (p. 4) is a “life-sustaining spirituality” (p. 4) that can establish harmony with living in balance with Mother Earth. It affords the ability to glean wisdom from our connection with the natural world that is not found in Western scientific ways of education (Kawagley, 1995). It is this awareness of a spiritual consciousness that I must

integrate into my CRRM activity. It should also be noted that, within the conversations of CRRM, the notion of supernatural as well as natural worlds within stories must be allowed, in keeping with Native tradition. This would most likely not be a part of a Western structure. As we sit in our CRRM with an awareness of our universe, we will be one with our natural world, and not in control of the universe as in a Western design. Forces outside of traditional Western constructs may illuminate our consciousness, a phenomenon that may be explained to students in the methods of CRRM work. Ilutsik reminds us that our “experiences and practices” (Barnhardt & Kawagley, 2011, p. 237) are essential to our learning, as is an immersion activity, so that we may be better able to teach others about those activities. Clearly, Ilutsik shows that the teacher must be part of the CRRM group, and I would do well to model my experience with the text to my students to make my teaching more effective.

Changing Times and Timeless Epistemologies

In Chapter One of *We Are Of the Iñupiat – People of Kauwerak: Legends of the Northern Eskimos*, Ekeuhnick observes how ants build themselves subterranean homes from grasses they carry into underground tunnels. He meets with a circle of his menfolk, relates his observation of the ants’ construction work, leads the men to observe for themselves, and then sits to discuss how the ants build homes (Oquilluk, 1973). It is in this excerpt from Iñupiaq legend that I find the essence of Native epistemology. Alaska Native peoples learned from nature as a model. In likewise fashion, I designed CRRM to follow Native ways of learning. That is, I chose activities that are relevant to Native ways of learning, for example, traditional oral transmission of the story becomes a discussion of the story elements, and traditional storyknifing becomes a way to construct Western graphic organizers.

When I asked students to share what they learned in a retelling of the content of the stories themselves via transmediation through an information technology medium (software on

MacBook computers), they recorded information they had learned and discussed. Through Iluksik's 'practice and experience' with different texts taught in this way, CRRM stayed in keeping with ancient ways of Alaska Native knowledge transmission, undoubtedly a more powerful and hopefully more effective way to teach reading than as we know it in Western form. In these ways, I believe, CRRM approaches learning of written content in a culturally sensitive way that is similar to the ways of old for Alaska Native children. As it constructs a gestalt of textual content with concept imagery enhancement, CRRM aligns itself with the Native notion of a holistic framework of knowledge, as opposed to a Western linear concept that is found in public schools today.

As John (2010) exquisitely reveals, a critical teaching methodology can be understood by a review of the complex, multi-layered, and brilliantly-faceted Yugtun teaching and learning framework, where wisdom comes from Elders, content is modeled by experts and is observed and copied by apprentices, and children learn experientially and take on greater degrees of expertise as they grow with practice. Learning is socially situated and place based, and children learn within the context of a litany of traditional cultural values. All are included in and none are excluded from group interactions. Students listen fully and try to understand in a gestalt framework before they question or are made responsible to respond to inquiries from adults. Learning of knowledge comes also from a spiritual awareness, a consciousness that comes from within. Spiritual awareness has been honed by the historical tradition of shamanistic influence, one that communicates with higher consciousnesses and different levels of being that is a mystery. Education is embedded within a connectedness to all living things, mankind, animals, trees and plants, and earthly elements and atmosphere. It is this connectedness that gives life and the ability to survive the elements. (John, 2010)

In stark contrast, the linear and reductionist nature of contemporary Western style

teaching and learning can be characterized by a learning of facts from edited textbooks or collected on the internet, commercially prepared programs that are presented to students to read, in book form or electronically, factual statements in math textbooks and computer programs to memorize and apply to problem sets, random writing assignments and memorization of language grammar and spelling.

In an effort to bring to bear an innovation in teaching reading to my students, I looked at the holistic model of the John's Yugtun (2001) and thought about how I would craft a methodology that would allow my Cup'ik students a better experience with reading class and with learning to understand what they read. As a product of American educational institutions, I look at the current state of education in America today, the way we teachers here in Alaska are expected to teach and see the conundrum set up by colonizers' high-stakes testing scores and Indigenous 'achievement gaps.'

It appears an examination of the Yugtun (John, 2001) is a start in a better direction. Perhaps we Westerners can see that even our Western educational system is no longer really influenced by Western European methods, it is simply a failed attempt to push programs into schools that has become a disgrace. A disgraceful failure, made even more so by well-educated people who choose to do nothing to transform it. As Alfred (2017) tells us, "The Colonizer Problem is the fact that... is built on the assumption of a perpetual re-colonization of people and land that allows settler society to enjoy the privileges and the prosperity that are the inheritance of conquest." (p. 1)

And that, “we have a massive engine generating social, cultural and physic discord; and not only among the perceived victims but among the imagined beneficiaries of dispossession too.” (Alfred, 2017, p.1)

This ‘massive engine’ of Western colonizers has produced not merely a diluted Vygotskian method in education today but has spit out commercialized ways to teach memorization skills. It is truly a travesty. More so because it is composed of educated people who continue to call each other “unbalanced” in their thinking of literacy practices, arguing over the best method to teach reading, never resolving issues to find genuine solutions for progress with our children.

So here, Taiaiake (2017) has described what our own Western colonizing society has done to the present state of education here in America. And when Westerners ignore transformative attempts to improve pedagogy by way of borrowing elements of Indigenous ways of teaching and learning (like storyknifing, talking circles, or spirituality), they create a ‘physic discord’ not only among Indigenous victims, but among their own ‘imagined beneficiaries’ as well. It is in this context I find myself acting as catalyst to conduct action research in an American public school (albeit Alaska Native) classroom that will make drastic changes to curriculum and teaching methods.

My study compares to John’s Yugtun (2001) in its effort to incorporate Indigenous methodologies, like storyknifing, storytelling, traditional knowledge transmission through folk tales, and the concept of a talking circle to discuss literature read in class. In addition, the methodology used in my study engages students’ cognition through the imagery of student imagination when they read traditional tales, draw diagrams (akin to storyknifing of old) to memorialize the imagery and represent the main tenets of the stories, and retell the stories in their own words (to pass along lessons learned to other generations) via transmediation with a

modern technological tool (to blend modern world views with the old). In the implementation of the study, I model what I expect students to produce in class (as did the masters to the apprentices) and allow students to produce and share their own responses to the stories read. Also, students must internalize the factual with the spiritual message they perceive while they study the texts. In so doing, my study attempts to replicate a holistic approach to study of literature that engages students in more than simply cognition of fact, and go further to record mental images as well as emotional responses that spring from deeper personal experience. Pingayak (1998) tells us that Cup'ik philosophy is a historically embedded part of stories that involves "a complex way of thinking" (p. 2) to understand them fully. Pingayak describes his difficulty with understanding the stories until he read them his grandfather's way:

My mental block can be described as not having experienced what my grandfather did, before extensive contact with Western civilization. The 'window to the past' was a complicated intellectual skill I had to develop. To accurately record the stories on paper, I had to visualize them. (Pingayak, 1998, p. 3)

This explanation supports the use of imagery in the methodology of the CRRM study.

My study attempts to mirror some of the Alaska Native epistemology, but perhaps falls short of John's Ellarpak (2001). The sense of interconnectedness represented in John's Ellarpak model, her model of the Yup'ik epistemology (2001) goes beyond what my study could attempt to measure. The three-dimensional notion of knowing, as represented in the Ellarpak, can be understood as an interaction of three states: that of the spiritual world, the human and non-human world, and the world under the seas. As John asserts (2001) "Ellarpak is a culturally constructed and reconstructed comprehensive Indigenous sociocultural theory and framework that captures the overlapping organic circular diagram that represents the transparency and fluidity of the three elements to form a unified and balanced spiritual existence." (p. 71) What, if anything, in the

Western tradition of teaching could possibly compare to that epistemological framework? If the Germanic sense of a gestalt were present in our modern day pedagogy, I could give credit to that model, but I cannot. However, I did attempt to form a sense of a gestalt within my classrooms when I used a group discussion format, an oral reading of the texts, a circular layout of student desks in the classroom, and the inclusion of a question about a spiritual aspect of stories in my list of questions for students to discuss. To my way of thinking, the creation of an ‘Ellarpak’ framework within a classroom will come in the future from Native teachers who have been raised in it. It is an atmosphere that Western style teaching cannot attempt to replicate, in my opinion.

As Okakok (1989) asserts, the value of the story in the Aboriginal worldview is clear. John (2010), Leonard (2007), and Topkok (2015), all discuss the value of the story in their doctoral dissertations. My pedagogy for reading, CRRM, uses a series of ten (10) stories over the course of a semester from the *Alaska Quarterly Review*’s Alaska Native Writers, Storytellers & Orators, The Expanded Edition (2001). The salient features of the story, i.e., main idea, main characters, plot, problem, and resolution are discussed within a framework of concept imagery construction. A written exercise follows the discussion to record the answers from questions discussed. Students then follow a semiotic framework and record their learning from the oral reading and discussion onto a visual format using drawings, diagrams, or symbols. The penultimate activity is to re-tell the story via Apple MacBook computer software. The goal of these activities is to increase cognitive activity among students and thereby improve their comprehension of the stories read. The AIMSweb® MAZE Test of Reading Comprehension Test measures student progress in reading comprehension as the study progresses and students read through the series of ten (10) stories. Similarly, the AIMSweb® R-CBM Test of Reading Fluency measures student progress in reading fluency as the study progresses.

In the chapters that follow, I describe the action research project implemented in my middle school classrooms at Chevak School, in Chevak, Alaska. Chapter 2 provides a summary of the literature search that builds a conceptual framework for my research study. Chapter 3 describes the methodology and methods that were used in my project. Chapter 4 presents the results of the quantitative and qualitative data collection phase of the mixed methods project. Chapter 5 sets out the conclusions drawn from the results of the research project and discusses implications for the future that can be suggested from the results and conclusions. The references cited and appendices are featured in the final parts of this dissertation.

Chapter 2

Literature Review

In this chapter, I introduce the literature review of my planned research dissertation, where I weave the commonalities of themes found in the literature that relate to my proposed action research. The categories that are included in this literature review are Meta-analysis Context of Education for Alaska Native/American Indian Peoples, Critical Literacy, Critical Pedagogy, Indigenous Pedagogy, Pedagogy for Reading Comprehension, and Transmediation. CRRM is a proprietary program of my own design. It results from my work experience as a classroom teacher and as a reading intervention teacher of students in rural Alaska Native village schools. A review of the literature suggested ways to devise ways to use Western methods along with analogous Alaska Native pedagogies.

My study fills in gaps in the literature in that there is very little research to be found on Alaska Native students and reading comprehension. My research does not challenge any theories discussed in the literature, rather, it adds to the body of work that begins to be published. There are significant questions not addressed in the existing literature that are addressed by my work. For instance, what specific pedagogies for teaching reading would help students understand more about what they read?

Overview and Rationale

In his introduction to *Alaska Native Writers, Storytellers & Orators*, Vizenor (1999) shows, in the Alaska Native way of knowing, the inherent meaning, vitality, and importance of literacy to Native lives. He shares it so we as non-Natives can appreciate the power, vibrancy, and significance of the literary works of Native peoples. As Vizenor eloquently shares the insights from Dell Hymes in *A Dena'ina Legacy: The Collected Writings of Peter Kalifornsky*,

“His ‘life and work teach that where there is intelligence and sharing of knowledge, the potentialities rooted in a human language can flower in our lives, even at the last hour.’ “ (1999, p. xviii) In addition, Vizenor tells us, “Kalifornsky’s ‘work is a network of literacy,’ and the ‘power of this literacy,’ of course, stems from a certain relation to life, from being able to use writing, with regard to what is already one’s own (1999, p. xviii). Vizenor goes on to describe writers: “Many creative storiers are the aesthetic shamans of scripture; they see the spirit of characters, and envision the scenes of a narrative by nature, by action, by myths, by ancestral names in the power of words.” (1999, p. xviii) Interestingly, in the literature of Critical Literacy, we find universal themes that Vizenor (1999) describes – the socially constructed aspect of learning and education, human potential for growth, the power of literacy to transform, and, the provenance of education from within the self that thrives on actualization in dialogue.

In her keynote address to the Circumpolar Conference on Education for Indigenous People in Nunavut (2012), Aviâja E. Lynge, from the University of Greenland, discussed common issues in culturally relevant education among the nations of the circumpolar north. Her important points included: 1) Greenland’s Indigenous peoples strive to find new ways to integrate cultural ways into school systems, 2) the effects of colonization remain in Greenland and elsewhere, and 3) school reform in Greenland will be a process of decolonization by way of a liberation theology like that of Freire (2011) towards wholeness for all people. Her statements strengthen my argument for a novel, effective pedagogy for teaching reading in rural Alaska. That is, to allow students to achieve more academically, we need to transform the ways we teach students in school settings. When we find a pedagogy for teaching reading that works well for students within their cultural framework, within their needs for self-actualization through dialogue (Freire, 2005), within their need to right the historical injustice of their oppressors

(Ladson-Billings, 2009), we would do well to implement the pedagogy for all Alaska Native students.

I designed the CRRM program to align with Native ways of knowing. That is, it attempts to build cognitive processes in a holistic way, in a method of dialogue, within a culturally specific setting, until students are able to see the whole picture of comprehending what they read. This aligns with Aviâja E. Lynge's statement:

Inuit, like many other Indigenous peoples speak after seeing the whole picture inside, and Western people speak until the picture becomes visible. (2012, p. 1)

My project is in keeping with the reform processes of decolonization in Alaska Native communities (Barnhardt & Kawagley, 2010) as well as those in other Indigenous populations around the globe. It seeks to find the effects of one strategy for teaching reading that thinks outside the box of mainstream Western practice. It offers a way to potentially reverse the effects of colonization that addressed in the following comment by Lynge (2012): "socio-cultural approach to accommodate the cultural backgrounds, identity, way of communicating, or way of learning" (p. 2). It also speaks to the themes of decolonization as described by Lynge – "contextualization, values, modeling, and holistic thinking..." (2012, p. 3).

In this research project I assume a role of politician, think outside the status quo, as Ladson-Billings (2009) intimates, and work to test a new way to encourage the quality and quantity of academic growth of Alaska Native students in reading. The CRRM program is in keeping Ladson-Billings' (2009) suggestions, as it is: instructive, supportive, extends student thinking, scaffolds learning, uses dialogue in a process of self-actualization, and is therefore part of culturally relevant multicultural education that is effective for student learning. As the Arctic Research Consortium of the United States (ARCUS) states, the changes in arctic societies over the last century have been rapid and diverse, and have led societies to a combination of

traditional and modern cultural elements (1997). As a result, in today's Arctic society, Inuit children need to learn reading skills equally as well as they need to learn subsistence skills. Alaska Native children need excellent reading skills to compete for jobs successfully in the modern world. The Western lifestyle with its technological advances, new job categories, and cosmopolitan travel plays an equally important role in the lives of today's Alaska Native youth. They face a future where a traditional Native lifestyle will be blended with that of the West in a "systemic integration" (Barnhardt & Kawagley, 2010, p. xv) style of acculturation. The process of acculturation to the Western society brought on by colonization will continue, and, in the sense of "instrumental acculturation" (p. 156) described by and Suarez-Orozco (2001), students will continue to study reading and writing and math as basic skills in school. They will also continue to take standardized tests mandated by state and federal governments.

My research studies one aspect of the Western construct of education, that is, teaching reading. I attempt to find a way for Alaska Native children to be taught to read at a level of proficiency within the modern world of government dictated standardized testing. My research plan to test the CRRM program, to strengthen academic achievement in reading, agrees with the Alaska Rural Systemic Initiative (AKRSI) finding discussed by Barnhardt in his Introduction to *Sharing Our Pathways, Native Perspectives on Education in Alaska*, the project supported in Native village school districts:

...strategically placed innovations that would serve as catalysts around which a new, self-organizing, integrated educational system could emerge that would produce the quality of learning opportunities that have eluded schools in Native Communities for over a century. (Barnhardt & Kawagley, 2011, p. xvii)

Barnhardt reports encouraging results from instruction that is grounded in cultural realities, with ...successful, well-rounded graduates who are also capable of producing

satisfactory test scores. (Barnhardt, et al., 2000, p. 4)

This finding spurs my quest for pedagogy that teaches reading in a culturally relevant way that complements Native ways of knowing and help Alaska Native children succeed in contemporary standardized tests of reading.

My research tests a unique reading intervention program that has the elements of allowing Alaska Native students the chance to ‘speak after seeing the whole picture inside,’ as Lynge suggests (2012, p. 1) and learn to read to higher levels of achievement as measured by test scores. The program, CRRM, is a unique mix of culturally responsive multiliteracies that connects Alaska Native concepts of pedagogy and methodology with those inspired by the West. Bell (2013) postulates that “Instruction in language and literacy should match a theory of cognition” (p. 6), with imagery an important part of sensory-cognitive functioning. Bell explained that success in reading happens when three important sensory-cognitive factors are present

...phonemic awareness (PA), symbol imagery (SI) and concept imagery (CI)”

(2013, p. 7). It is the CI that allows readers to form an “imaged gestalt (whole)

from oral or written language. (p. 7)

that is strengthened with the Lindamood-Bell Visualizing and Verbalizing (LBVV) program (Bell, 2013). Most recently, the use of LBVV program has shown significant gains in reading comprehension among minority students of low socioeconomic status in Pueblo, Colorado public schools. (Sadoski & Willson, 2006) From these studies, I was prompted to include imagery in CRRM pedagogy, to underscore the essential cognitive process of understanding what is read.

Reading is a skill that can be taught with a variety of commercial programs available to school classrooms. Pedagogy that teaches reading can teach both Indigenous and Western knowledge. As Barnhardt & Kawagley state,

...Within each of these evolving systems there exists a rich body of complementary knowledge and skills that serve to strengthen the quality of educational experiences and improve the academic performance of students throughout rural Alaska. (2011, p. xii)

Review of Relevant Literature

Historical Contexts of Education for Alaska Native/American Indian Peoples

Centuries ago, long before Alaska Native and American Indian peoples had contact with Caucasian people, education was experiential, culture-based and site-specific. Oquilluk (1973) relates his story of how people learned to build homes from observation of ants in nature.

The Iñupiat Qualgi was the place to gather recent information and train the young (Personal Communication with Angelina Koonuk, Tikigaq Village Elder, now deceased, 2006). The oral tradition of storytelling and storyknifing epitomized transfer of knowledge throughout the generations in Yupi'ik society. (Parker-Webster, 2007) In the 1800s, with the advent of the Massachusetts whaling vessels, contact with the Western culture began, with introduction to the toxicities of alcohol, tobacco, and Western disease. As early Americans (and Russians before them) made inroads into Alaska Native culture, missionaries followed with systems of education under church direction, as described by the Alaska Federation of Natives (AFN) (1995). Later, with the influx of government agencies, the Bureau of Indian Affairs (BIA) ran schools for Alaska Natives transported from home villages to abusive boarding school settings. Natives suffered greatly from the colonization efforts, stripped of their language, families, and culture. (Okakok, 1989) The loss from vast epidemics from Western induced diseases took an enormous toll on the Alaska Native population. Through this, Alaska Natives endured and held fast to their roots (Napoleon, 1989). Although robbed of aboriginal property rights, the Alaska Native Claims Settlement Act in 1971 opened a new historical chapter, one of self-determination, local control

of home schooling, and the revitalization of Native language and culture. The time of living in two worlds had begun. Alaska Natives now continue to face the challenges of educating their children in bilingual and bicultural environments. They now struggle with decolonization efforts, to assure healthy futures for their children and grandchildren (Andersen-Spear & Hopson, 2010). For further discussion of Alaska Native education, see Barnhardt (2001), Dauenhauer (1997), Napoleon (1989), and Oleksa (1994).

Critical Literacy

Freire's (2005) way of thinking is transformative. He not only inspires the oppressed to rise above the abusive power of sectarian autocrats, but also makes us realize this type of action changes lives forever. In a similar way, in his keynote address to the Conference of the Alaska Native Studies Council in Anchorage in April 2013, Graham Hingaroa Smith of New Zealand encouraged the audience of educators to think along the lines of Freireian transformation, when he said, "If you're going to do something in education, do something that is transformative." Professor Smith made plain that the duties of Indigenous educators in New Zealand were the same that Freire (2005) relayed to us in *Letters To Those Who Would Dare Teach*. I heard, in his keynote address, the same themes I have gleaned from the literature. That is, Freire's (2011) empowerment of the underclasses, Remillard & Cahnmann's "portraits of struggle" (2010, p. 184), Moje's unsanctioned literacies (2000), Kliever's self constructed literacies among special needs students (2008), and Kirsh's (2011) "transformative spoken word poetry" (p. 50) all harbor the same themes that resonate with Smith's Indigenous population in New Zealand today. The themes of human striving for improved quality and equality of life are universal, and underscore Freire as a true founder of modern day pedagogy for those who struggle.

The notion of dialogue in Freire's pedagogical method is a vital, timeless theme that is central to the book and is repeated in several of the other readings for the course. For example,

Moje's unsanctioned literacy practices parallel Freire's pedagogical method of dialogue, so that the marginalized also may be "Part of The Story" (Moje, 2000, Title). Dialogue was also central to Kliever's study, where he found that children construct "new understandings of the world" (Kliever, 2008, p. 115) by listening to stories told by others and making their own interpretations from interaction with their own inner experience. In other words, students and storytellers exchange a dialogue of information and construct new meanings for their world. The "power of dialogue" (p. 67) is real for Hobbs (2007) as well. In the liberatory and transformative spirit of Freire (2005) and Ladson-Billings (2009), my project has the potential for more effective solutions to decades-old problems in Alaska Native students' reading achievement.

Street & Lefstein (2007) lend further support to the discovery of novel ways to teach reading to Alaska Native students, with their ideological theory of literacy. In this, they claim that literacy is interwoven with cultural aspects of Native language, customs, and place. A novel pedagogy, like CRRM, may be best tried within the Native village environment, as my study will do.

Critical Pedagogy

In a descriptive study by Buly (2005), American Indian fourth graders, on an Indian reservation in the Pacific Northwest of the United States, were tested both on standardized tests and on specific skill areas in reading to determine if there was any relationship between them. Buly found that students needed specific instruction in reading comprehension strategies and to learn how to adjust their reading rate to different purposes for reading. Buly states, rightly so, that culture alone added to the classroom will not help readers who struggle in the upper grades and that future research into the benefits of culturally relevant pedagogy is needed. The population studied was similar to Indigenous communities in the state of Alaska, with half of its students proficient in reading when compared to non-Indigenous schools (AKDEED, 2013).

Even though standardized tests have limitations for definite conclusions, owing to bias and built-in errors, the problem remains that an inconsequential diagnosis of reading difficulties cannot possibly inform the right instruction needed to correct any difficulty. Therefore, the study went beyond summative evaluation of readers by standardized tests, and tested readers for basic reading skills, and analyzed the relationship between them. The study found that students performed adequately in the politically popular reading skills of phonemic awareness, phonics, and isolated word meanings. The study suggests, for future considerations

...carefully conducted research on the effectiveness of different types of instruction when matched to the assessed needs of American Indian/Alaska students...to gain insights into what might be the most effective instruction. (Buly, 2005, p. 49)

In another study, I found issues that informed my study of Indigenous readers in that my work may align with or diverge from conclusions drawn by Dunn (2001). In Dunn's meta-analysis of culturally relevant pedagogy, cultural differences of Aboriginal Australian students are noted, where learning is holistic, unlike the Western linearity. Dunn (2001) asserts that all children, regardless of cultural background, are capable of achieving levels of proficiency with schoolwork, so that it is important to determine "what can be done to give children from all types of family background a more equal opportunity at school" (Dunn, 2001, p. 679). It is in this type of environment that my study is situated. Dunn suggests that..."the important issues that concern literacy development for children of cultural minorities...are likely to be the mode of delivery of literacy education and whether it fits the preferred style of literacy learning" (Dunn, 2001, p. 684). Therefore, I continue to search for pedagogy that will engage Alaska Native children in effective reading programs that teach them to read proficiently enough to satisfy government mandated testing. Dunn (2001) further suggests pedagogy that includes social history of the

Indigenous group, Elder visits to classrooms to give culturally relevant literacy instruction, family engagement in school literacy programs, teachers trained with sensitivity to Indigenous ways of knowing, language experience techniques for relevancy in classroom information, knowledge of children's group learning preferences, acceptance of Indigenous language, and teacher involvement in local school communities. Dunn concludes the study by giving an international application to findings about cultural differences and its relevancy to literacy learning. This informs my study in that I can ask: will the issue of culturally relevant curriculum be a factor in improving student achievement on standardized tests?

Indigenous Pedagogy

Kawagley informs us of the nature of Native ways of teaching and knowing. In his tetrahedral model, Kawagley explains the Yup'ik worldview as a combination of three different realms within the universe, - the human, the natural, the spiritual realms (Kawagley, 1995). In his discussion of the holotropic mind, as opposed to the Western mind, Kawagley asserts that everything has spirit, all realms in life are interconnected, and Yup'ik epistemology takes a holistic view of life (Kawagley, 2006). In terms of learning and knowledge, the Alaska Native culture holds as central the power of the human mind, the sense of place where one is situated, and the sustainability of life. These tenets hold fast as the cyclical nature of Yupi'ik life turns, while the Western view is more linear, disconnected, and compartmentalized in contrast (Kawagley, 2006). This being said, the Cup'ik cultural experts in the village of Chevak informed the design of my research study, with study assessments tailored to reflect more than just quantitative scores on standardized tests. The value of a balanced view of both qualitative and quantitative data is clear according to Kawagley's holistic philosophy of life (Kawagley, 2006).

Constantino & Hurtado (2006) reveal a special, supplemental, Native designed and taught curriculum that uses culturally based Indigenous storytelling as its core activity in classrooms.

Early reports show that students show a high level of enthusiasm for learning to read, and the Native community shows an increased level of participation in school activities. Students themselves invite Elders in to classrooms, and join with them for interviews for class assignments. It is an encouraging report from the Northwest region's study of American Indian students. It attempts to improve academic performance among Alaska Native and Native Hawaiian students as well. It is an organization worth watching for future developments in student reactions to curricular programs.

The Alaska Native Knowledge Network (ANKN) published a report of the work of the Alaska Rural Systemic Initiative (AKRSI) (Barnhardt & Kawagley, 2011). The AKRSI, a project conducted jointly by the University of Alaska Fairbanks and Alaska Native rural village communities, included a longitudinal study of student academic achievement in twenty rural Alaskan villages from throughout the State of Alaska. The AKRSI, funded by the National Science Foundation, attempted to find ways to combine Native ways of knowing and Indigenous knowledge with the school systems that resulted from Western colonization, in a process of reform. The report said,

We now have strong evidence that when we make a diligent and persistent effort to forge a strong cultural fit between what we teach, how we teach, and the context in which we teach, we can produce successful, well-rounded graduates who are also capable of producing satisfactory test scores. (Barnhardt, Kawagley & Hill, 2000, p. 4)

This finding supports the notion that Alaska Native students can work to close the gap in standardized test scores, given strong cultural variables that serve to engage them in math coursework. In my study, I examine the data for similar phenomenon in reading.

Pedagogy for Reading Comprehension

McLaughlin and Allen, (2001) prominent researchers in the field of reading, report that:

Studies have shown that multiple factors affect successful reading comprehension.

The following research-based tenets delineate those we believe to be the most influential: Comprehension is a social constructivist process. Balanced literacy is a curriculum framework that fosters comprehension. Excellent reading teachers influence student's learning. Good readers are strategic and take active roles in the reading process. Reading should occur in meaningful contexts. Students benefit from transacting with a variety of texts at multiple levels. Vocabulary development and instruction affect reading comprehension. Engagement is a key factor in the comprehension process. Comprehension strategies and skills can be taught. Dynamic assessment informs comprehension instruction. (2001, p. 6)

This informs my study in that, from my experience as a reading teacher, from the best I have learned from forerunners in the field of reading research, an ideal program for teaching reading comprehension will be 'dynamic,' 'active', 'strategic', and 'meaningful', for students. My study will examine the effect of my program on student reading comprehension as measured by standardized test scores and student surveys.

Fillmore & Snow (2000), underline the importance of the purpose of my study, to find a better way to teach students to understand what they read. The authors report:

Effective reading instruction requires integrating attention to the system of phoneme-grapheme mappings with attention to meaning. Children may encounter difficulties because they do not understand the basic principle of alphabetic writing - that letters represent sounds - or because they cannot

segment the sounds reliably, or because they don't know the words they are expected to be reading. Second language learners are particularly likely to find difficulties in producing, remembering, and distinguishing the target phonemes and to lack the knowledge of how words are pronounced that would help them in decoding. (Ruddell & Unrau, 1997, p. 27-8)

From this we see that teachers must address phonetic awareness with a remedial eye when teaching reading comprehension.

“Unbalanced” is the term used to describe the current state of methods that teach reading comprehension, by Concanon-Gibeny & Murphy (2012). Concanon-Gibeny & Murphy further assert that much attention is given to the teaching of decoding strategies in the early grades, and yet not much pedagogy for direct instruction of comprehension of what is read is taught until after the elementary grades.

In a study by Kissau & Hiller (2013) we see, in the Vygotskian tradition, German and American teachers report certain methods of teaching reading comprehension appeal more to them in view of their teaching practices. They report that certain teaching techniques are more helpful to students in particular subjects. The study reiterates the fact that not much information exists on what works for effecting positive change in reading achievement scores from the teaching platform and more research is needed.

Graves, et al., (2001) in Kissau & Hiller, (2013) report that before, during, and after strategies are helpful for students when teaching reading comprehension. Biemiller, (2001) in Kissau & Hiller, (2013) reports a correlation between vocabulary and reading comprehension. Palincsar & Brown (1985) in Kissau & Hiller (2013) liked the method of cooperative learning, as did Brady in his studies in rural Alaska (1990). Clarke, in Kissau & Hiller, (2013) touted the Jigsaw technique. Biancarosa & Snow in Kissau & Hiller (2013) indicate there is value in

teaching reading comprehension. Fillmore and Snow in Kissau & Hiller (2013) further suggest a thorough grounding in educational linguistics would be beneficial to teachers of English language, so they might have a better understanding of how the English language works. This would help to prepare teachers with greater depth of comprehension of both content and direct instruction of English language. This is a consideration to be included in any recommendations made as a result of my research study of how reading may be taught more effectively throughout rural Alaska.

Transmediation

Evans (2005) makes clear that reading takes on new meaning today for classroom students:

A text is now seen as a unit of communication that may take the form of something written down but also a chunk of discourse, for example speech, a conversation, a radio program a TV advert, text messaging, a photo in a newspaper, and so on...have changed the ways in which young readers expect to read, the ways they think, and the ways they construct meaning.

(Evans, 2005, p. 8)

Altenderfer, et al. (2012) worked with children's literature in a way similar to the one I designed in CRRM. The study used the children's tale, "Hansel and Gretel" in action research. Students retold the story by way of Comic Life software, with photography they produced. The authors found that students enjoyed the experience with the literary text, discovered more subtleties in the text itself as they described universal themes found in the literature, and had a sense of "re-claiming" (p. 47) the literature they read, and enjoyed new technologies. This supports my theory of CRRM program as an experience that may result in more motivation for to the study of reading within the classroom environment.

Summary/Conclusion

My research is significant to Indigenous communities in rural Alaska, in that it addresses a crucial component of education, reading fluently with comprehension. CRRM offers a new way to teach reading in village schools that can be used in conjunction with culturally relevant topics. It has the potential to benefit struggling readers in Alaska's Native rural villages. There is much that can be done to find new and better ways to teach children to read more effectively. There is much that needs to be done to better prepare today's students to meet the realities of Alaska State standardized tests that remain a reality.

To summarize, my proposed research study draws from sources of Indigenous ways of knowing, ways of documenting Indigenous knowledge, from critical literacy and critical pedagogy, and from transmediation as new methods for teaching reading comprehension. A review of relevant literature reveals that the topic of pedagogy for reading is relevant to the contemporary political agenda for education both in the State of Alaska and in the nation. My study potentially informs policy for curriculum design in schools as well as for professional development of teachers. Further research would definitely be a natural progression, as responses to new programs and curricula are always under scrutiny for effectiveness by educational administrators and government personnel. This brings us to the end of the chapter on literature review. In the next chapter, I will describe the methodology and methods used to implement the action research project in my middle school classrooms. I will discuss the combination of modalities used to bring a fresh approach to teaching reading with culturally relevant reading materials. The methods and instruments for data collection will be revealed.

Chapter 3

Research Methodology

Purpose

The design of my CRRM pedagogy was intended to harmonize with cultural pedagogies of the Alaska Native people. I used the format of a Guided Reading, discussion, and retelling, a method parallel to the culturally practiced process of storytelling in the oral tradition in Yup'ik history (Webster, Yanez, & Andrew-Ihrke, 2013). Yup'ik and traditions are similar. The Cup'ik language is described as “a speech variety in the region of Hooper Bay, Chevak, and Nunivak Island.” (ANLC, 2017)

As Pingayak (1998) tells us, the people of Chevak were originally one group of Cup'ik Natives from the region of the Western coast of Alaska, in the Yukon-Kuskokwim Delta region. The group later divided into the Quissunamiut tribe on the Kashunak River (Chevak), and the Mekroyuk Cup'ik on Nunivak Island (Pingayak, 1998). Old Chevak Village, with the remains of the original village gravesites and old houses is located on the Kashunak River close to sea level and the Bering Sea outlet. Modern day Chevak was relocated after flooding forced the community to move the village to higher ground and settled on land given to them by another tribe, about fifty miles upriver. The people live in the Central Yup'ik region. The dialects of the Cup'ik and Yup'ik peoples are different and distinct, and are understood by all. (Pingayak, 1998)

The word “chevak” itself has a literal meaning of a shortcut, (Jacobson, 1984) and relates to the Quissanamiak Cup'ik tradition of cutting a channel through the land of a peninsula that is made by a hairpin turn of a river, thus eliminating the need for a boat to travel the two lengths of the peninsula when travelling down the river and shortening the route actually traveled. There are several “chevaks” in the rivers that have been man made as “shortcuts” in area of the present day location of Chevak village. The region is characterized by its mazes of rivers and tributaries

that flow to the Yukon and Kashunak Rivers and out to the Bering Sea, interspersed with marshlands, prime habitat for nesting grounds of the rare species of Emperor geese. In places of higher elevation, a multi-layered rich microcosm of tundra abounds, colorful and teeming with Labrador tea plants and other medicinal herbs, and various species of edible berries. (Boyscout, 2009)

The new Chevak is located closer to a mountainous area within the southwest delta, where an abundance of animals provides good hunting for food. Temperatures range from -20 F. in the winter months to balmy 60 in the summer, when most inhabitants vacate the village to travel to their fish camps where they harvest salmon to store for food supplies for the year. Russian Orthodox and later, Catholic, missionaries, who established churches and urged Alaska Natives, to convert to Western ways historically visited the region. These influences remain today in village life. (Boyscout, 2009)

Alaska Native Cup'ik and some Caucasian school personnel, teachers and administrators, inhabit the local community. The people continue with traditional Cup'ik ways, with a Cup'ik language immersion program for elementary students in a Cup'ik language Kindergarten. School students continue with Cup'ik studies through Grade 12, village Elders visit the school regularly and address students with lessons of Cup'ik values, Native dancing, hunting, fishing, and trapping. Chevak adults teach Cup'ik customs in the home, and young boys and girls learn to fish for grayling, pike, salmon, smelts, and to hunt for grouse, ducks, geese, and swans as well as moose, bear, and seal. Subsistence living remains an important part of life in Chevak. The community enjoys traditional Native dancing and village potlucks. It is home to 3 different denominations of churches, and its artists revel in skin sewing, basketry, beading, and doll-making.

The people of modern day Chevak have attempted to integrate ancient cultural ways into contemporary school curriculum, with the publication of a guidebook for integrating Cup'ik culture and curriculum (Reagle, 2017). The Chevak Village Youth Association (CVYA) established a facility for extra-curricular activities, where young people listen to music and socialize after school. Students enjoy their time at the CVYA, where they also see positive role models, work on community service projects and participate in activity planning. (MacDiarmid, 1982).

My work built on the work of several investigators who did research studies with reading comprehension with Indigenous populations. Brady (1990) is one investigator who worked in the Yukon-Kuskokwim Delta region of Alaska, in the Yupiit School District, with Yupiit school students, where he sought a method for teaching reading that would improve student comprehension of what they read. Similar to Brady's study, my work included pre- and post-testing of student reading comprehension with a standardized testing instrument, AIMSweb® MAZE for reading comprehension and R-CBM test of reading fluency. However, my study differed from Brady's in that I used a proprietary pedagogy and not the cooperative learning model.

The testing instruments were the AIMSweb® MAZE Test of Reading Comprehension (Shinn & Shinn, 2002) and the AIMSweb® R-CBM Test of Reading Fluency (Shinn & Shinn, 2002), instruments used by the school in its assessment program. The program assessment started with a Benchmark Test in January 2016, and proceeded with Progress Monitor follow-up tests at regular intervals during the semester. The Benchmark Test was given again at a final time in May. Data were collected from this programmed roster of tests and was recorded on a computer program that charted progress reports for each individual student. The program provided a record of student scores, gathered over the course of the semester. It also

produced line charts of individual student data, for an effective visual review of student progress. The benefits of using the AIMSweb® system to gather and record data were substantial.

To reiterate, the research questions were: 1) What effect did the Culturally Relevant Reading (CRRM) program have on student reading fluency, as measured by AIMSweb® R-CBM test? 2) What effect did the CRRM program have on student reading comprehension, as measured by the AIMSweb® MAZE Test? 3) How did reading class influence students attitudes toward reading? And, 4) How do the local Cup'ik community experts envision reading being taught in Alaska Native schools in an ideal way?

The Intervention: CRRM Program

The stories in the CRRM program were taught within a guided reading context, (Fountas & Pinnell, 1996) and included culturally relevant materials that were pre-approved by the Research Committee Chair and the school principal. Culturally relevant materials included those written by Alaska Native authors, those that describe Alaska Native lifestyles and values, and those that include Alaska Native characters. They were selected from the *Alaska Quarterly Review (AQR)* (Spatz, Breinig, & Partnow, 2001). The stories that were used in the study are: 1) *Why Subsistence Is A Matter of Cultural Survival: A Yup'ik Point of View*, John Active (p. 182,) 2) *Lake Dwarves (told in Eyak)*, Michael E. Knauss (p. 7), 3) *Giant Rat*, Anna Nelson Harry (p. 9), 4) *Shag and the Raven*, Johnson & Lawrence (p. 21), 5) *Fish Story: Karta Bay (told in English)*, Victor Haldane (p. 18), 6) *Raven and the Mallard Girl (told in Gwich'in Athabaskan)*, John Fredson (p. 155), 7) *Speech for the Removal of Grief (spoken in Tlingit)*, Jessie Dalton (p. 34), 8) *Qulireq –Tale*, Leo Moses (p. 80), 9) *The Gambling Story*, Peter Kalifornsky (p. 143), and 10) *The Crow and The Mink (told in Yup'ik)*, Mary Worm (p. 89).

To answer relevant questions suggested by Linda Smith (2012, p. 175-6), the research

problem was defined as a result of my experience in teaching elementary school and reading in rural Alaska. The study is relevant to Alaska Native children who have historically struggled to be competitive with their non-Native peers throughout the State of Alaska, as determined by State of Alaska standardized testing requirements. One potential outcome of the study is that Native communities in Alaska, as well as the researcher and research community will gain the knowledge of how to teach Alaska Native students to read to a level of proficiency that is predetermined by Alaska State authorities. A possible negative outcome would be that the data show no pedagogical method that is clearly superior to any other in preparing students for standardized tests. The researcher is accountable to Chevak Native village, including Elders and educators, a local School Board, an Institutional Review Board, and a University Research Committee, and University of Alaska Fairbanks personnel. Processes in place to support the research, the researched, and the researcher were the Institutional Review Board, the University Research Committee, the local School Board and the Village Elders themselves. The University of Alaska Institutional Review Board granted approval for the study in March of 2016. The approval letter is found in Appendix A (page 93).

The combination of several modalities and approaches to learning may make my CRRM program more effective than previous pedagogies used to teach students to understand what they read. I believe the methods in my design of CRRM are relatable to Yup'ik epistemological knowledge. All three authors, Archibald (2008), Wilson (2008), and Smith (2012) are consistent in their notion of giving space to Indigenous researchers to explain their approach to research issues, time to rewrite rationale, methods, and processes of inquiry and to explain their own framework. This led me to see that I need to allow time and listening skills to effectively receive Indigenous researcher-participants' ideas and comments as the study progresses. This goes along with Wilson's (2008) assertion of "respect, reciprocity, and responsibility" (p. 77), Smith's

(2012) “external relations” (p. 193), and Archibald’s (2008) sense of “respect and caring that guides my feelings and actions” (p. 61) that have informed me of my responsibility to inform local people respectfully when I ask for consideration of my research project in their communities. My research methodology was further informed by Wilson’s discussion of research as a way to “raise our consciousness” (2008, p. 69) and by Archibald’s assertion of research as a way to: “enable people to sit together and talk meaningfully about how their Indigenous knowledge could be effectively used for education and for living a good life and to think about possibilities for overcoming problems they experience in their communities,” (2008, p. 81) in that I will need to allow time for this type of dialogue to occur in the Chevak community following my research project’s conclusion. I brought this understanding to bear as I proceeded ‘responsibly’ and ‘respectfully’ in ways that made the research endeavor and the concept of reading pedagogies a richer experience for all concerned. Therefore, communication with the school community, most importantly with the local School Board, will continue both during and after the data collection period to update board members on my progress and to finally present information learned from the research.

Archibald further informed my work in her discussion of effective storytelling pedagogy. Techniques like knowing a story well, relating to a story personally, modeling meaning making from stories, story recall, making connections, reverence, holism, interrelatedness, and synergy (2008) are good criteria for the design of my curriculum and lesson plans for the study. In addition, the lessons in CRRM must include Archibald’s (2008) ideas to know stories well by “writing it on your heart” (p. 140) and that a

...good story can reach into your heart, mind, and soul, and really make you think hard about yourself in relationship to the world. (p. 140)

The rigor suggested from this Indigenous framework for storytelling would undoubtedly

make for more effective readers and was included in my study design.

Another positive outcome from this study may be the availability of more effective and relevant options for professional development, that is, to prepare teachers to teach reading in classrooms. It may also spur school administrators to integrate more advanced technology for each student in the school, to facilitate better understanding of what is read. It may also lead to the implementation of computer technology classes, so that students may learn keyboarding skills and basic computer concepts as a regular part of the curriculum much earlier in their school careers. Most importantly, CRRM may allow students a way to learn to read text in a way that they find helpful, enjoyable, and memorable as well as increase their motivation and interest in reading in school.

Study Participants

Chevak, an Alaska Native community, is located in the southwestern region of Alaska. It is found south of the mouth of the Yukon River at Hooper Bay, where the Yukon River flows into the Bering Sea. Historically, Chevak was located closer to the Bering Sea, until an extensive flood necessitated relocation of the village to a spot on higher ground farther inland. Old Chevak, the original site of the village, is a destination spot for tours, where artifacts of interest remain. Chevak, at its new location, with a population of approximately fifteen hundred people, has a modern school facility, airport with several daily flights, water treatment plant, several Christian churches, and a medical clinic. Residents of Chevak live a subsistence lifestyle, hunting and fishing for local wildlife as a source of food as well as shopping at two grocery stores that are stocked with foodstuffs flown in daily. The Cup'ik Native traditions are taught in the dual language program at the school, in the homes, by the teachings of the Elders in school visits, and with participation in Native dancing and celebratory events.

The expectations for students around literacy were high, in that the school community anticipates positive outcomes in their educational programs. The district recommends specific, commercial programs for teaching reading for use by teaching staff, programs that had changed from year to year. At the time of this study, programs that had been used previously included were Read Naturally, Glencoe basal readers, class sets of library classic novel selections, and Read180. There was a Reading Specialist teacher on staff at the school who coordinated the current reading program, Success for All, in which all teachers in elementary and middle school participate. I joined in with the other teachers to use Success for All to teach reading skills in my classrooms during reading class in the mornings. During language arts classes, however, Success for All was not used, but other materials were used to teach grammar, literature, and writing. There were some reading intervention programs for struggling readers available from the reading coordinator. Program materials tried previously were still stored in classrooms and in the library. For instance, there were various workbooks available in my classroom designed to teach study skills, vocabulary, and reading comprehension available for use during language arts classes. Class sets of classic novels were available in the library. All teachers were able to use online resources. In general, teachers were free to creatively address reading challenges with program materials that were approved by the school board. And so, if I wanted to present a new program, I needed to first ask permission of the principal and then present my program to the school board, both of which I did successfully.

In my first year of teaching at Chevak School, I requested permission to do my action research project in my classrooms. My request was denied and I was told the administration had no time to commit to research study. In my second year of teaching language arts to middle school at Chevak, with a different principal in place, I was pleased to be able to begin the action research project in my classroom during the second year of my tenure at Chevak School, despite

delays in gaining responses from some parties in school administration. It was then I began to realize my posture as an agent of positive social change that was not universally accepted. A research study like mine situated within a Western style curriculum would not be an easy road to travel, not in the past, nor would it be in the future, but I pressed on with research methodology. The approval for my project finally came from both the school principal and the local school board.

I conducted the CRRM program with students in the seventh and eighth grades at Chevak School during the Spring 2016 semester of instruction. A regular Chevak School Language Arts curriculum was used for the control group. This curriculum used reading selections and worksheet handouts for novel studies during the semester. The CRRM program served as the treatment for the experimental group. The CRRM treatment group read a selection of ten (10) stories within a Guided Reading format, held discussions to build concept imagery, completed a written and a sketched assignment to record salient story features, and prepared a summation of story elements via informational technology software on Apple MacBook laptop computers. More precisely, the students typed paragraphs that summarized the stories using the software program Microsoft Word. The selected stories were the ten (10) selections from the anthology *Alaska Native Writers, Storytellers & Orators* (Spatz, 2001) discussed previously. The study took place at Chevak School, a Cup'ik Alaska Native village school for Kindergarten through grade twelve in Chevak, Alaska, a coastal village on the southwest coast of Alaska. The study had a pre-test (Benchmark Test) at the study outset, regular Progress Monitor tests, and a post-test (Benchmark Test) at the end. The purpose of gathering this data was to determine the effect of CRRM on student reading comprehension. In addition, pre- and post-study surveys were given to all students that included questions about student motivation for reading.

The pre- and post-tests were the AIMSweb® MAZE Test of Reading Comprehension

(Shinn & Shinn, 2002). This test was a standardized, close-procedure test that students completed to the best of their ability within three minutes. The tests used were selected from the web-based AIMSweb® resources for the Winter and Spring Benchmark Tests. The AIMSweb® R-CBM Test of Reading Fluency (Shinn & Shinn, 2002) was also given to students in the study. AIMSweb® MAZE Progress Monitor tests (Shinn & Shinn, 2002) were also given to students as the study progressed. These tests were selected from the AIMSweb® online resources from a sequential listing of separate and different tests over the course of the semester.

Students also completed written surveys that contained Likert-scale measurements on their ideologies of school literacy processes both before and after the program. These questionnaires asked students to rate, on a basis of one to five, their responses to questions about their reading classes, the culturally relevant materials used in the study, and their motivation for reading in school. The pre- and post-test surveys are found in Appendix B (page 95).

The four classrooms of seventh and eighth grade students were set up initially by another teacher, the Middle School Math teacher, who selected the content of the two classes within each grade level. This was in keeping with the preferred method of class selection by the teachers and the administration at the school, with which I complied for two years. To maintain consistency, I requested, as a member of the middle school teaching team, that students remain in their groups for the semester-long study. This goal was accomplished. These four middle school classes reported to me at various periods of the school day for Language Arts instruction. I flipped a coin to randomly assign classes to both the control and experimental groups. The control group in the study of was composed of two middle school classes, one class of eight (8) seventh grade students, and one class of ten (10) eighth grade students. Therefore, the total number of students in the control group was eighteen (18). These students did not follow CRRM, but read and discussed literature in class and wrote responses in student journals and printed handouts.

The experimental treatment group in the study was also composed of two middle school classes, one class of nine (9) seventh grade students, and one class of ten (10) eighth grade students. Therefore, the total number of students in the experimental group was nineteen (19). The study had a quasi-experimental design (Mertler, 1990). There were four classes of language arts middle school students, two for seventh grade and two for eighth grade. One-half of the seventh (and eighth) grade class was in the control group and did not participate in the CRRM program. The other half of the seventh (and eighth) grade was in as the experimental group, and participated in the CRRM program.

As a middle school teacher at Chevak School, in the Kashunamiut School District, in the Alaska Native Village of Chevak, Alaska, my day was spent teaching Language Arts to seventh and eighth grade students. My research project, CRRM, was a unique and proprietary program for teaching reading that included both traditional Yup'ik storyknifing technique and Apple technology. The program was designed to compare academic achievement in reading between classes of students who read Western style literature in their language arts classes and classes of students who read culturally relevant reading materials in their language arts classes. The program used in the experimental group began with traditional stories written by Alaska Native authors. Students took turns to read the story aloud in class, then diagrammed the story using storyknifing technique, answered five questions about story content, and then typed a summary of the story on Word computer software. When it was time to do the storyknifing exercise, the male students asked whether or not they should participate, as only female members of the group traditionally do storyknifing. When I assured the male participants that, for the purposes of the study, they would be welcome to join in the activity with the females, and they did so eagerly. In so doing, we degenderized the traditional roles of male and female young people within the practice of storyknifing.

The Researcher in Context

As a teacher on the North Slope of Alaska for six years, I previously lived in Point Hope (Tikiġaq) and Utquiaġvik (Barrow) Alaska Native villages. My educational background was a Master's Degree in reading and certification in education from universities in Pennsylvania, where I spent most of my life. As I completed the master of education, with a concentration in reading, I searched online for opportunities to share the benefits of my education. I began teaching at Tikigaq School in rural Alaska in 2006. After living in the Arctic for six years, I moved to a position of Literacy Leader at Akiachak School in the Native village of Akiachak in the Yupiit School District. My next position was teacher of Middle School Language Arts at Chevak School in the Kashunamiut School District, where I conducted this action research project with the Alaska Native Cup'ik students in my classrooms.

As a classroom teacher, my orientation is always to do my best to have all students show growth in reading over time. My orientation as a researcher was to complete the research project required by the academic program in which I was enrolled. As Mertler (1990) tells us, teacher action research is a process that includes, at the outset, the identification of an issue in need of improvement or correction selected from within the teacher's interests in education. Further, it involves experimentation, analysis of results, and reflection with discussion on conclusions that can be drawn from the trials (Mertler, 1990). Action research studies end in written summaries of the process, so that others may benefit from findings.

My research study contributes to the cultural practices and quality of life for Native peoples in rural Alaska in that it attempts to discover what works in teaching students to better understand what they read. I compared the control and experimental groups' pre- and post-test scores to determine the extent of the effect of the CRRM program on reading comprehension.

My field notes hold relevant qualitative information regarding the study participants, the study milieu, the study's implementation, and student reactions to the study.

Study Timeline

During the reading of the story, as is customary in Guided Reading formats, (Fountas & Pinnell, 1996) I paused at certain times to ask students to build a conceptual image of story events in their minds. This is in keeping with the Yup'ik oral tradition of learning from conversation with others and listening to stories told by others. The pedagogy for instruction began with a short story, written by an Alaska Native author that was presented to students in a Guided Reading format (Fountas & Pinnell, 1996). Students read the story out loud in class in an order of their own choosing. Guided Reading followed by oral discussion questions is similar to the Native traditional of oral storytelling, in that the Cup'ik traditional way of knowing was learning from listening to stories told by others, usually Elders. After that, students discussed and recorded salient features of the story, using drawings, diagrams, symbols and/or words in a freeform chart of their own design. The recording of salient features of the story using drawings is akin to the Yup'ik tradition of storyknifing (also used in the Cup'ik villages), a practice that was historically used by young girls to relate stories to other children in their villages, (Webster et al., 2013) where symbols, used to represent certain aspects of Yup'ik life, were scratched into mud or snow by carved and decorated writing instruments, usually wooden, that were shaped like knives (and hence the term storyknifing) created solely for this purpose. Students used a pencil to draw on paper, instead of a storyknifing, to carve, a diagram of the story in its three parts, -- beginning, middle, and end. Examples of student work in this modality if found in Appendix C (page 97). This was also similar to the semantic mapping used by Brady (1990). Although the practice of semantic mapping could be helpful to student comprehension of the story elements, as Brady (1990) found, a conceptually new and more student friendly mode, such

as Microsoft Word software on Apple Mac Laptop computers, was used to prepare summaries of the stories read. This served to take the concept imagery built by students during the lessons and move it, via transmediation (Seigel, 1995 and 2006) to a visual modality, similar to the tradition of storyknifing. A discussion of the story that attempted to include all students, ensued. I then asked students to discuss and write answers to five scripted questions about each story they read. That is, they wrote answers to the following questions: 1) What is the main idea? 2) Who are the main characters in the story? 3) What happened at the beginning, middle, and end of the story? 4) What was the problem in the story and how was it resolved? And 5) What is a spiritual lesson you learned from the story? An example of student work in this modality is found in Appendix D (page 99). Finally, to complete the CRRM procedures, Apple MacBook technology, by way of Seigel's (1995) transmediation technique, allowed students to use a software program on an Apple MacBook laptop to complete a typed summary of what they read. An example of student work in this modality is found in Appendix E (page 101).

Data Collection

Interviews with cultural experts, that is, teachers of the Cup'ik language and cultural customs at the school included individual ideologies around the issue of literacy and story comprehension. In particular, I sought the insight of Native Cup'ik ideals for story comprehension, one that included the spiritual aspect of story transmission. In other words, how are Cup'ik spiritual precepts portrayed in a printed story? How might a teacher discuss Cup'ik spiritual issues with students when reading a story in a classroom? How would the understanding of spiritual issues be recorded and assessed when students read a story? I sent interviews, preformed with questions, via email to four cultural experts. Completed written interviews were received back from two Cup'ik Studies teachers, both of whom I considered LCEs. The information gleaned from the responses shaped the discussion part of the study. It also formed a

framework for analysis of the data that is site-based and that guided the discussion of study results.

The methods used pre- and post-test data collection (two Benchmark tests of equivalent design) and progress monitor tests at regular intervals during the study. Surveys were administered to determine student ideologies of literacy processes of CRRM as well as motivation for reading classes both before and after the stories were read. The survey instrument was designed to determine the student response to the efficacy of CRRM in helping them better understand what they read. The AIMSweb® web-based platform programmatically gathered and recorded the data from student tests of both reading comprehension and fluency.

The study had a quasi-experimental design, in that the students were not assigned to the four groups randomly (Mertler, 1990). However, the groups were assigned randomly to the control and experimental conditions within the context of the study. The study used a mixed methods approach with both quantitative and qualitative aspects.

Quantitatively, the study included pre- and post-tests for reading comprehension (the AIMSweb® MAZE Test), re- and post-tests for reading fluency (AIMSweb® R-CBM test), and pre- and post-study questionnaires with a Likert scale measurement. The study used inferential statistics, namely, repeated-measures *t*-tests and independent samples *t*-tests in the data analysis, to determine significant differences between the group comparisons. Response surveys, administered to students both before and after the program, contained a Likert scale approach with questions, and quantitatively determined student ideologies around the use of technology to improve reading achievement. Students answered questions about their participation in the research program, their literacy profile, and their motivation to participate in reading classes.

Qualitatively, the use of storyknifing as a method to teach and assess reading

comprehension lent cultural significance to the study as it was used historically in Cup'ik communities.

Field notes and teacher observation of student responses were also recorded. The two previously mentioned LCEs, two Native Cup'ik teachers at Chevak School, answered written interviews. These interviews provided important insight into Cup'ik worldviews of an ideal way to teach students to read in school. They included questions on student achievement in reading comprehension from the Cup'ik point of view, and thereby provided a cultural perspective on an ideal framework for assessment of student reading comprehension. Written interview responses from the cultural experts also lent insights into the value of the study methods within local Cup'ik ideologies about teaching reading.

My research adds to the current body of knowledge about Native American/Alaska Native student academic achievement in reading comprehension with use of meaningful and culturally relevant materials in classroom pedagogy. It also adds to the body of knowledge about the effects of new pedagogy on student academic achievement in reading fluency and comprehension. The kind of information I sought for my research was the change in test scores of the students in the treatment reading groups. I measured student performance on reading comprehension tests, with a pre-test given before CRRM begins at the start of the semester. Follow-up Progress Monitor tests were given at regular intervals for the duration of the semester. A post-test was given at the end of the study. The AIMSweb® MAZE Test of reading comprehension and the R-CBM test of reading fluency (Shinn & Shinn, 2002) were used in the study to test for growth in reading. I recorded student scores over the duration of the semester. In the data analysis, I examined those scores for changes between the pre- and post-test scores. I examined the data for patterns and potentially significant increases in test scores on the AIMSweb® MAZE Test of reading comprehension and R-CBM tests of reading fluency.

Data Analysis Techniques

As part of data analysis for data collected during the semester, the pre-test scores were compared to the post-test scores. In addition, the completed pre- and post- study surveys, designed to indicate student motivation and interest levels in reading, were examined. The data collected were used in discussion of study results and conclusions. The intent of one of my research questions was to find out if the unique pedagogy of CRRM affected student achievement in Reading, and so data were collected over a semester of the school year, where instruction in CRRM occurred on a daily basis, for forty-five (45) minutes each day. A discussion of reasons for the outcome of any observed patterns in the data is followed by conclusions and a summary of the effect of the pedagogy on the treatment groups. The implications for further research are discussed.

Ethics

To approach the research in a culturally considerate way, I sent written questions about teaching reading to the Cup'ik cultural experts at the school. These questions, sent via email at their request, attempted to further define the Native view of reading as a school subject and as a way students are judged for achievement. I addressed the differences and tensions between the notions of “literacy” and “pedagogy” in Western schooling and Indigenous cultures, in an analysis of the experts’ questionnaire responses.

The participating group members as well as the local school board will have access to study conclusions. I will complete a report written for them in an upcoming communiqué. These findings potentially may inform policy-making at administrative levels in the future. I will provide to the Board, in readable terms, the results found in my study along with any conclusions that can be drawn from analysis of the data collected. A session for questions and answers from the Chevak community at the study conclusion was provided during a school board meeting. I

presented my research project to the local Kashunamiut School District School Board after I obtained the Chevak School principal's and district superintendent's approval to present my study to the school board. This was the second year I had requested approval from my administration to conduct action research in my classroom. I persevered through a series of conversations with the administration to gain approval to present the project to the local school board. At the school board meeting, I described my project with an oral presentation and a written summary, provided potential benefits to the educational community in Chevak, and allowed for questions. I requested permission to take the data from the twelve-week period of the program from the AIMSweb® website, to do a retrospective analysis of student academic achievement. I also informed them of the study's implementation in my classroom and among Cup'ik Studies teachers. There were no questions or comments from the school board or from the attendees. The school principal later related to me the Chevak community's homogeneous approval of my research proposal after she received no objection to the project at the meeting or beyond. It came to my attention that the school board president was in favor of the study being implemented in my classroom.

In that my dissertation involved work with human subjects, namely, seventh- and eighth-grade students at Chevak School, as well as local Cup'ik cultural experts, an application to the Institutional Review Board at University of Alaska Fairbanks was submitted for approval before the work began. Approval was received and is displayed in the document found in Appendix A (page 93). I mitigated chances for harm to study participants by implementing the study within the context of a regular Language Arts class lesson plan. In addition, I completed the CITI online course on two occasions, one as an update.

Standardized tests scores are published by public school districts annually, and reveal students who can read at a pre-set level of proficiency and those who cannot. This testing is a

fact of life in Alaskan public schools. Alaska Native children are subject to the testing along with non-Native children. Although literacy critics feel this generic endeavor cannot be applied fairly on a nationwide basis, and that the content of the tests and testing protocols may not truly measure how well students read, students and their school districts are judged by their performance on standardized reading tests. This research project endeavors to give rural students a better chance at being prepared for these tests. This follows the tenet of the Alaska Rural Systemic Initiative:

...To implement a set of school reform initiatives that systematically documented the indigenous knowledge systems of Alaska Native people and developed pedagogical practices and school curricula that incorporated indigenous knowledge and ways of knowing into the formal education system. (Barnhardt & Kawagley, 2011, p. xi)

Pedagogy that teaches reading can teach both Indigenous and Western knowledge. It is the aim of this study to determine a pedagogy that best teaches reading to rural Alaska Native children.

As Barnhardt & Kawagley (2011) state,

...Within each of these evolving systems there exists a rich body of complementary knowledge and skills that serve to strengthen the quality of educational experiences and improve the academic performance of students throughout rural Alaska. (p. xii)

By way of reporting study results, I ultimately provide an example of a way to teach reading comprehension that uses new technology, that is culturally responsive, and that integrates Alaska Native literature with Western teaching traditions. In this way, rural Native children may be helped to proficiency in Alaska State tests of reading. The study may inform policy on what specific pedagogies work well for teaching reading comprehension effectively to

rural Alaskan school children. School districts will be able to plan curriculum and provide new programs that help children learn to understand what they read. School district administrators may learn what to offer as professional development to train teachers to teach reading in the most effective way. In short, rural Native (and non-Native) children may have a better way to learn to understand what they read.

As ARCUS asserts, when doing research

...there is a need to promote mutual respect and communication between
scientists and northern residents. (ARCUS, 1999, p. 55)

Therefore, I provided informed consent to all parties as required by the University Institutional Review Board, along with study purposes and goals, consultants and guides, data gathering and its uses, and predictable positive and negative outcomes from the study (ARCUS, 1999). Copies of reports of the study conclusions will provide information learned from data analysis and will be shared with the Chevak community and with the population at large. Publication of the study will be made in local newspaper sources as well as at state and national venues for research articles. Confidentiality throughout the study was ensured, and meaningful training was offered to parties affected by the study (ARCUS, 1999).

In the spirit of Barnhardt & Kawagley (2010), my work was sensitive to cultural protocol, was an effort to heal negative effects of colonization in holistic ways, and honored the wisdom of cultural experts in a context of Native language bilingual education. In the words of Okakok (1989),

...we need to take as much care in choosing the system as we do in defining our goal.

(p. 116)

And that,

...we take every effort to make certain the new ideas are compatible with our

philosophy. (p. 116)

To summarize, my study explored new strategies within a unique pedagogy for teaching reading comprehension, one that used both modern technology and traditional Alaska Native methods and materials. The trial of CRRM in village schools was consistent with Barnhardt & Kawagley's attempt to blend Native and Western cultural customs (2011) in that Yup'ik pedagogy was embedded into a Western format. With CRRM, transmediation moved story elements from Yup'ik oral storytelling and storyknifing into Western class discussions, written exercises, graphic organizers, and typed summaries.

This brings us to the end of the discussion of study methodology in Chapter 3. Chapter 4 will present the actual results of the experimentation that was implemented in the classroom. Tables and Figures will present the results of both the quantitative and qualitative parts of the study.

Chapter 4

Results

The results of the study are set out here, with the completion of data collection from the period of January 2016 to May 2016. The study was conducted at the Chevak School, in my middle school classrooms. It involved four of my middle school language arts classes, the better part of my teaching day at Chevak School. This was my second year of teaching at Chevak School as a Certified Teacher in English Language Arts.

To reiterate the research questions that guided the study, I looked to find: 1) What effect did the Culturally Relevant Reading (CRRM) program have on student reading fluency, as measured by AIMSweb® R-CBM test? 2) What effect did the CRRM program have on student reading comprehension, as measured by the AIMSweb® MAZE Test? 3) How did reading class influence students attitudes toward reading? And, 4) How do the local Cup'ik community experts envision reading being taught in Alaska Native schools in an ideal way?

The study was an exploratory sequential mixed methods study using a quasi-experimental design, with two student groups, Group A as the experimental group and Group B as the control group. Group B, the control group, had a regular course of Language Arts class for the duration of the study that included regular curricular materials used in classrooms at the school. Group A, the experimental group, had the CRRM curriculum that included culturally responsive materials and techniques as designed by the study investigator. The growth of student reading achievement (for both fluency and comprehension) was compared between the two groups. Growth in reading was measured by Pearson's AIMSweb® MAZE Test of Reading Comprehension as well as by Pearson's AIMSweb® R-CBM Test of Reading Fluency. Measures of student growth in reading were taken both before and after the implementation of the study. Students' attitudes towards reading were gathered through pre- and post-study surveys as well. Information from written

interviews that were offered to LCEs about Native perspectives on Reading at Chevak School was coded according to a coding scheme and insights were recorded.

Summary of the Data

In a mixed methods study, data were collected and analyzed both qualitatively and quantitatively. Qualitatively, data were collected via student pre- and post-study surveys and from written interviews given to LCEs. Quantitatively, reading data from two separate groups were analyzed. Student growth in reading, both in fluency and comprehension, was measured during the course of the study. The data were analyzed by way of Independent-measures *t*-tests and by repeated-measures *t*-tests. Both the Experimental and Control groups were comprised of both seventh and eighth grade middle school students from Chevak School who took a Language Arts class as part of their daily schedules. Data collected from Group A, the experimental group of students, were compared with Group B, the control group of students. The *t*-test statistical results show us the effect of the study program on student reading achievement, comprehension and fluency separately. It shows how the students from the Control Group, who had standard Western-style reading materials used in their language arts class, grew in their achievement on school standardized reading tests over time. It also showed how the students from the Experimental Group, who had Alaska Native cultural stories used in their language arts class, grew in their achievement on their school standardized reading tests over time. The results of both of these groups were compared. The means and standard deviations were examined to check for significantly different values when conducting the *t*-tests. From these comparisons, we can start to draw conclusions on the effect of Alaska Native cultural materials on student growth in reading achievement. It can potentially show which materials, when used in language arts classes, can help students to achieve more growth in reading. Table 1 shows the summary of the participants in the study.

Table 1: Summary of the Participants in the Study

Experimental Group A	18 middle school students
Control Group B	19 middle school students
Total Study Participants	37 middle school students

Distribution of Data: AIMSweb® MAZE Test of Reading Comprehension

The histogram in Figure 1 shows the distribution of the reading comprehension growth variable with the AIMSweb® MAZE Test results. Since it was close to a normal distribution, it met assumptions of distributions for the *t*-test, and so an independent measures, two-tailed *t*-test was performed. This was an attempt to determine any significant difference between the growth experienced by the students in experimental and the growth experienced by the students in control Group B on the AIMSweb® MAZE Test.

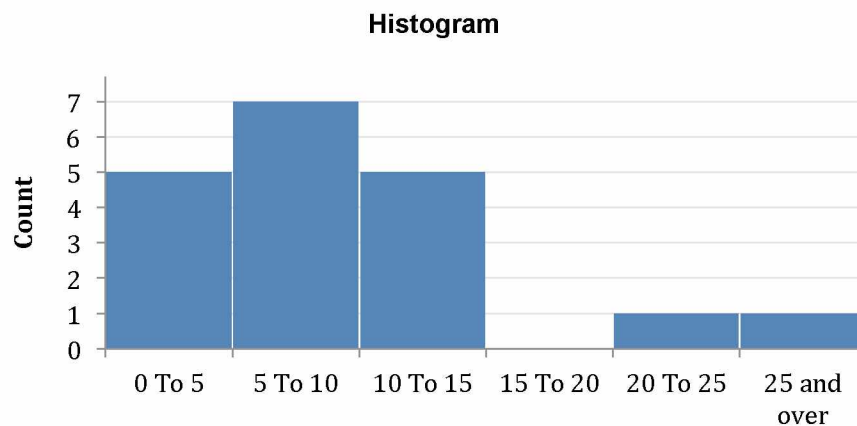


Figure 1. Distribution of AIMSweb® MAZE Growth Experimental Data

The data in Figure 1's histogram were close enough to a normal distribution, so an independent measures *t*-test was performed to compare the mean scores between the control and experimental groups.

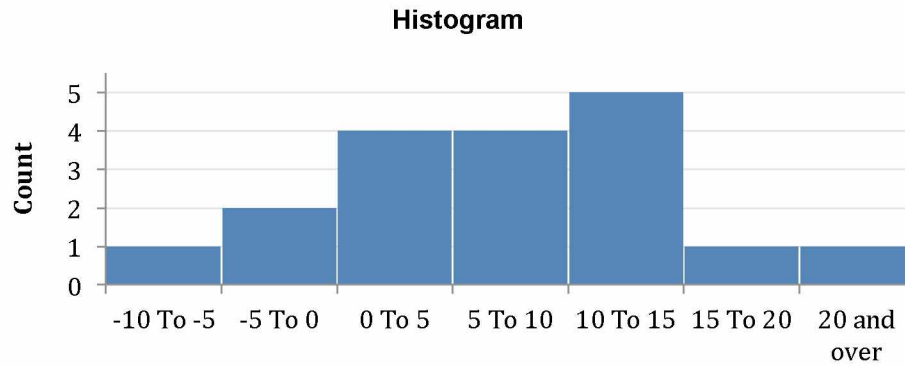


Figure 2. Distribution of AIMSweb® MAZE Growth Control Data

The data in Figure 2's histogram were close enough to a normal distribution, so an independent measures *t*-test was performed to compare the mean scores between the control and experimental groups.

Table 2. Results of *t*-test AIMSweb® MAZE Growth

Independent Samples *t*-test

Group	N	Mean	S.D.
A	19	8.842	6.431
B	18	7	7.707
<i>p-value</i>	<i>0.436</i>	<i>Critical Value 5%</i>	

No significant difference ($p > 0.05$) was found when the means of the control and the experimental groups were compared in this *t*-test. The *t*-test results are shown in Table 2.

Distribution of Data: AIMSweb® R-CBM Test of Reading Fluency Growth

The histogram in Figure 3 shows the distribution of the reading comprehension growth variable with the R-CBM Reading fluency test results.

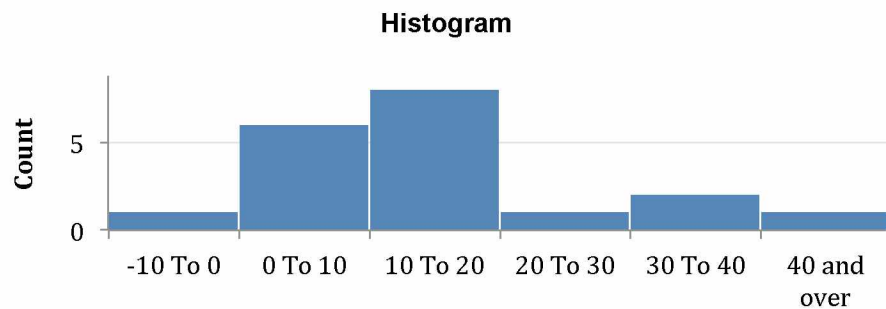


Figure 3. Histogram to Show Distribution of AIMSweb® R-CBM Growth Experimental Data

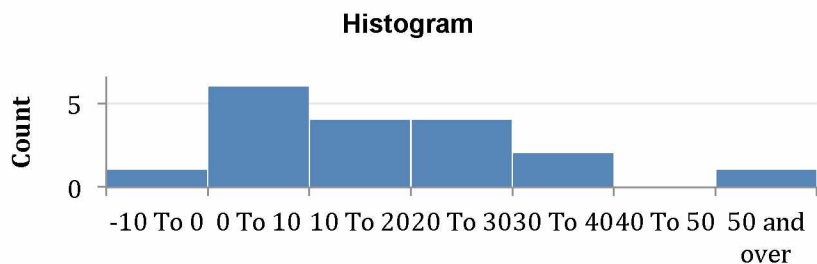


Figure 4. Histogram to show Distribution of AIMSweb® R-CBM Growth Control Data

Since the data in these histograms were close enough to a normal distribution, an independent measures *t*-test was performed to compare the mean scores between the control and experimental groups. This was an attempt to determine any significant difference between the growth experienced by the students in experimental Group A and the growth experienced by the students in control Group B during the study on AIMSweb® R-CBM. The results of the *t*-test are shown in Table 3.

Table 3. Results of the *t*-test for AIMSweb® R-CBM reading fluency growth.

Group	N	Mean	S.D.
A	19	14.263	12.868
B	18	16.777	15.175
<i>p-value</i>	<i>0.591</i>	<i>Critical Value 5%</i>	

The *t*-test in Table 3 reveals no significant difference ($p > 0.05$) in R-CBM scores for students who were in the experimental groups when compared to the scores for the students in the control groups.

Student Growth in Reading Skills

It is important to note that there was growth shown by both the control and experimental groups from the beginning to the end of the study. In other words, on average all students experienced growth in reading comprehension and reading fluency, regardless of the curriculum that was used in their classroom. Figures 5 and 6 show the histograms from the pre- and post-test AIMSweb® MAZE data for all students.

AIMSweb® MAZE Data Analysis for All Students

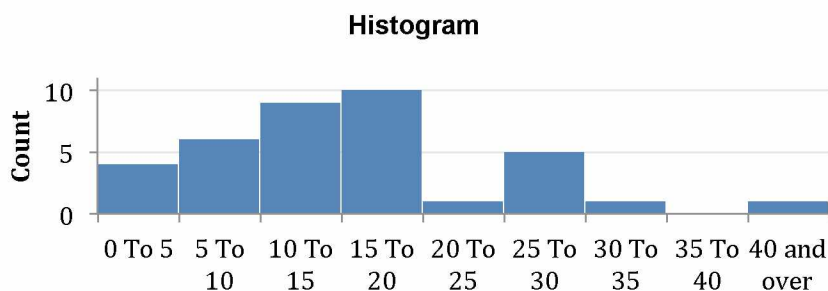


Figure 5. Histogram of Pre-test AIMSweb® MAZE Data for All Students

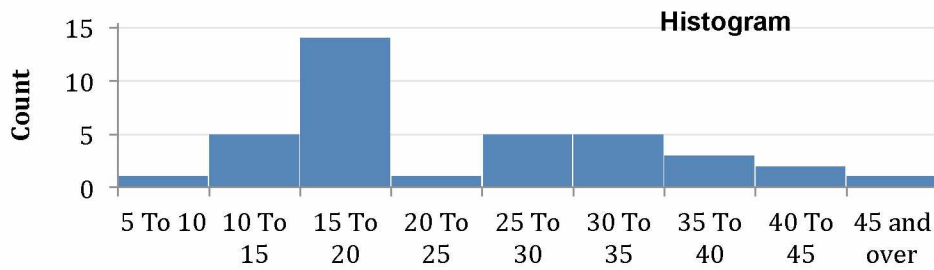


Figure 6. Histogram of Post-Test AIMSweb® MAZE Data for All Students

The data in the histograms in Figure 5 and Figure 6 were close enough to a normal distribution, so a repeated measures *t*-test was performed to compare the mean scores between the Pre- and Post-study scores for students who took the MAZE test of reading fluency. The results of this *t*-test are shown in Table 4. There was significant difference ($p < 0.05$) shown between the Pre- and Post-test MAZE scores when a repeated measures *t*-test was used to compare the means of the Pre-and Post-test scores for the groups as a whole.

Table 4: Results of *t*-test for Pre- and Post- Study AIMSweb® MAZE scores for All Students.

***t*-test Results**

Group	N	Mean	S.D.
Pre-test MAZE	37	15.432	9.139
Post-test MAZE	37	23.432	9.976
<i>p-value</i>	0.00059	<i>Critical Value 5%</i>	

AIMSweb® R-CBM Data Analysis for All Students

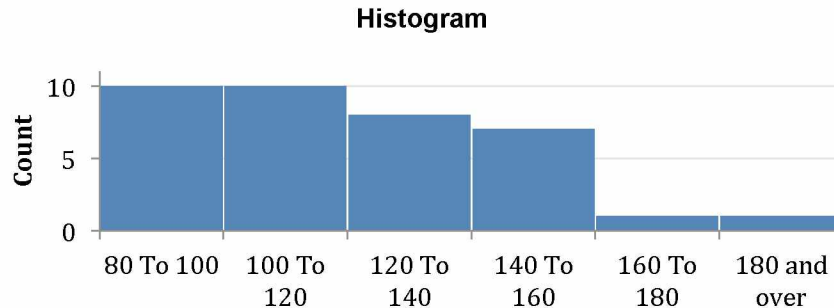


Figure 7. Distribution of Pre-test AIMSweb® R-CBM Data for All Students

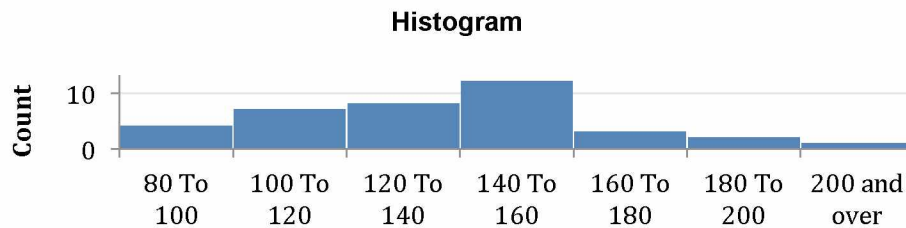


Figure 8. Distribution of Post-test AIMSweb® R-CBM Data for All Students

The data in the histogram in Figure 7 and Figure 8 were close enough to a normal distribution, so a repeated measures *t*-test was performed to compare the mean scores between the pre- and post-study scores for all students in the AIMSweb® R-CBM test. Table 5 shows the results of the repeated measures *t*-tests for the AIMSweb® R-CBM test of reading fluency.

Table 5. Results of *t*-test for AIMSweb® R-CBM test scores

***t*-test Results**

Group	N	Mean	S.D.
Pre-test R-CBM	37	120.918	25.202
Post-test R-CBM	37	136.405	28.289
<i>p</i> -value	0.01526	Critical Value 5%	

Table 5 shows that there was significant difference ($p < 0.05$) found between the mean scores for reading fluency when all students were considered.

Student Surveys and Study Effects

The next issue I examined was whether the reading class had any effect on student attitudes towards reading. This was measured by pre- and post-study surveys given to students, with responses quantified by a Likert scale method. The pre-study survey was given on January 15, 2016. The post-study survey was given on May 6, 2016. The students who took this survey were from all of the groups. The questions used on the pre- and post-study surveys are found in Appendix B (page 95).

Tally of Data from Pre- and Post–Study Student Surveys and Resulting Bar Graphs

Data from both pre- and post-study Student surveys were tabulated in charts shown below, with a separate chart for each question on the Surveys, Questions 1 through 5. The data were also converted to bar graphs for ease in understanding the shift in attitudes that occurred during the study. The bar graphs are displayed in Appendix F (page 103) as Figures F.1, F.2, F.3, F.4, and F.5.

Tabulation of Survey Results

The tables that follow, Tables 6, 7, 8, 9, and 10, show the results of the tabulations of data from both the pre- and post-study surveys that were given to students. The tables show the results and percentages of responses for each of the five questions on each survey.

Table 6: Tabulation of Results of Pre- and Post-Study Student Survey Responses to Question #1
– I enjoy reading class.

Response on Surveys	Number of Responses Pre-Study	Number of Responses Post-Study	Percentage of Responses Pre-Study	Percentage of Responses Post-Study
1-Agree Strongly	0	2	0	5
2-Agree	7	19	30	50
3	10	13	43	34
4	4	4	17	11
5-Disagree Strongly	2	0	8	0

Table 7. Tabulation of Results of Pre- and Post-Study Student Survey Responses to Question #2
– I am motivated to take a reading class in school.

Response on Surveys	Number of Responses Pre-Study	Number of Responses Post-Study	Percentage of Responses Pre-Study	Percentage of Responses Post-Study
1-Agree Strongly	0	2	0	5
2-Agree	7	19	30	50
3	10	13	43	34
4	4	4	17	11
5- Disagree Strongly	2	0	8	0

Table 8. Tabulation of Results of Pre- and Post–Study Student Survey Responses to Question #3
– I like the subject matter of the stories we read in class.

Response on Surveys	Number of Responses Pre-Study	Number of Responses Post-Study	Percentage of Responses Pre-Study	Percentage of Responses Post-Study
1-Agree Strongly	0	1	0	3
2-Agree	9	14	39	37
3	8	19	34	50
4	6	3	26	8
5- Disagree Strongly	0	1	0	3

Table 9: Tabulation of Results of Pre- and Post–Study Student Survey Responses to Question #4
– I want to read at home after school.

Response on Surveys	Number of Responses Pre-Study	Number of Responses Post-Study	Percentage of Responses Pre-Study	Percentage of Responses Post-Study
1-Agree Strongly	0	17	0	3
2-Agree	3	11	13	13
3	7	10	30	47
4	7	0	30	29
5- Disagree Strongly	6	0	26	8

Table 10: Tabulation of Results of Pre- and Post–Study Student Survey Responses to Question #5 – The Cup’ik culture is part of our reading class (Pre-Study) and The Cup’ik culture should be a greater part of our reading classes (Post-Study).

Response on Surveys	Number of Responses Pre-Study	Number of Responses Post-Study	Percentage of Responses Pre-Study	Percentage of Responses Post-Study
1-Agree Strongly	1	17	4	45
2-Agree	2	11	9	29
3	5	10	23	26
4	4	0	18	0
5- Disagree Strongly	10	0	45	0

Bar charts display the data shown in Tables 6, 7, 8, 9, and 10 further and are shown in Appendix F (page 103), Figures F.1, F.2, F.3, F.4, and F.5.

The data show that on Question #1, students as a whole increased their enjoyment of reading class more after the Post-Study Survey. We cannot link the data to the CRRM program, but can infer that improvement came from both groups of students, the control as well as experimental groups since the sixty-eight percent (68%) of students who enjoyed reading class on the pre-study survey grew to eighty-one percent (81%) on the post-study survey.

The data show that on Question #2, students as a whole increased their motivation to take a reading class in school more after the post-study survey. We cannot link the data to the CRRM program, but can infer that improvement came from both groups of students, the control as well as experimental groups since the seventy-three percent (73%) of students who were motivated to take a reading class in school on the pre-study survey grew to eighty-nine (89%) on the post-study survey.

The data show that on Question #3, students as a whole liked the subject matter of the stories read in class more after the post-study survey. We cannot link the data to the CRRM program, but can infer that improvement came from both groups of students, the control as well as experimental groups since the seventy-three percent (73%) of students who liked the subject matter of the stories read in class on the pre-study survey grew to ninety percent (90%) on the post-study survey.

The data show that on Question #4 we cannot make inferences about students' desire to read at home after school. The forty-three percent (43%) of students who enjoyed reading class on the pre-study survey grew to sixty-three percent (63%) on the post-study survey but we cannot link this to the CRRM program.

The data show that on Question #5, students as a whole changed their attitude towards

Cup'ik culture being part of their reading class after the post-study survey. We cannot link the data to the CRRM program, but can infer that improvement came from both groups of students, the control as well as experimental groups since the thirty-six percent (36%) of students who stated that the Cup'ik culture is part of their reading class on the pre-study survey grew to one hundred percent (100%) who stated that the Cup'ik culture should be a greater part of reading class on the post-study survey.

The data show positive effects on student motivation towards reading, reading class, and the use or potential use of cultural materials in reading classes. The level of enjoyment of the subject matter of the stories read in class showed an increase over the time period.

Written Interviews from Local Cultural Experts (LCEs)

This section deals with information gleaned from Written Interviews, given to LCEs, about Native perspectives on Reading at Chevak School. The Written Interviews were given to several LCEs, who held teaching positions at Chevak School, via hard copy and email, as they requested. The questions that were included in the Written Interviews are displayed in Figure G.1, which is found in Appendix G (page 107).

The Written Interviews that were completed and returned were reviewed and coded according to a coding scheme. The coding scheme that was used is set out in Figure H.1, and is found in Appendix H (page 109).

The Written Interviews from the LCEs and the method used above to code the qualitative data collected in the study allowed the construction of “a framework for key findings” (Mertler, 1990, p. 145). Results show the most important aspect of teaching students to read, based on LCEs perspectives, is direct instruction of reading skills. These skills might include oral reading in class, retelling of the story, and written responses to the story.

The next most important factor in teaching students to read was teacher training.

Teaching that instills reading skills early in school, with increasing difficulty as students mature, was mentioned as a crucial element in teaching students to read well and understand what they read. Also mentioned as influential were teachers who use their own beliefs and unique ways of applying their craft to create memorable experiences for students as they learn reading skills. Teachers who use their teaching skills to create positive outcomes for students were also important, as were the presence of Cup'ik Values in reading class curricula. A list of Cup'ik Values is found in Appendix I (page 111).

Parent involvement in school, the use of an inference model when teaching reading, and the inclusion of thinking skills into the program were also mentioned by the LCEs as critical components of reading instruction.

The one characteristic that appeared most often throughout the comments on the Written Interviews provided by the LCEs was a sense of respectfulness. The LCEs showed a deep sense of respect for the information that the Alaska State standardized tests could provide educators in the quest to improve student academic achievement. They discussed a respect for Cup'ik Values, for parental involvement in the teaching process, and a respect for trained teachers who strive to give their indelible and unique flair to the process of teaching students to read.

The findings from the LCE Written Interviews connect to statements made by the students on the Pre- and Post-test Surveys in that they provide hope for a better future in the educational experience of Alaska Native students. Hope in that they have greater interest in having cultural stories be a part of their reading curricula. Hope in that they experienced enhanced interest in reading class as a result of reading Native cultural stories in the CRRM program. Hope in that the CRRM created a shift in their attitudes towards attending a reading class and towards the materials used therein. It also presents challenges, in that students still are not highly motivated to read at home for leisure or for homework. This issue could be addressed

by the LCEs comments about increased parental involvement in school. Perhaps a sharing of the cultural stories read in school with family members would lead to more reading at home and more interest in reading outside of class. This is further evidence that LCE input into the design of future research projects using CRRM would be beneficial to student participation and achievement. The comments from the LCEs also present the challenge of teachers trained in CRRM and the ability to present material to students in memorable ways. This is always a consideration, and would be even more so when teachers are asked to work with stories outside their own culture as part of the curriculum. Additional training would be indicated for teacher success in classrooms with CRRM.

This brings us to the end of the section about the results of the study. The next chapter will discuss the conclusions that can be drawn from the results, taking into consideration both the qualitative and quantitative data analyses. The conclusions will report on what the study has found to be accurate outcomes of the CRRM program. They will also discuss the implications for the future that can be postulated as a result of our review of the data analyses. Suggestions will be given to improve similar future research studies.

Chapter 5

Conclusions and Implications for the Future

Conclusions

A reiteration of the study's research questions will help to focus the points made in this section of conclusions from the results of the data analysis. The questions I examined in this research were: 1) What effect did the Culturally Relevant Reading (CRRM) program have on student reading fluency, as measured by AIMSweb® R-CBM test? 2) What effect did the CRRM program have on student reading comprehension, as measured by the AIMSweb® MAZE Test? 3) How did reading class influence students attitudes toward reading? and, 4) How do the local Cup'ik community experts envision reading being taught in Alaska Native schools in an ideal way?

The results of the study show that the experimental group of readers, who had the culturally relevant stories used in their program of CRRM during the study, showed average gains in reading comprehension when compared to the control group, although it was not a statistically significantly higher level of growth. The experimental group also showed average gains in reading fluency when compared to the control group, although it was not a statistically significantly higher level of growth. When the study results are viewed from the perspective of student readers as a whole, growth in reading achievement, both in reading comprehension and reading fluency, was found to be statistically significantly higher regardless of curriculum. The study provides promising results. The scores for the reading tests in all student groups showed that students in the CRRM program did not lose ground with growth in reading, as measured by the AIMSweb® MAZE Test of reading comprehension. Similarly, the scores for the reading tests in all student groups showed that students in the CRRM program did not lose ground with growth in reading fluency, as measured by the AIMSweb® R-CBM test of reading fluency.

Therefore, the study indicates that we can use culturally relevant stories in reading programs to engage students in their reading classes and they could achieve results similar to that from a Western program. In addition, students will not lose ground with their academic growth in reading if they substitute culturally relevant materials for the packaged commercial products used routinely in Alaska Native rural village schools like Chevak School.

In a qualitative vein, students enjoyed the culturally relevant reading material that was used in class. They felt very positive about use of the CRRM in their classes. By the end of the study, one hundred percent of students wanted to include CRRM in their Language Arts classes. As a result of the student surveys, students increased their enjoyment of reading class. Their motivation to take a reading class increased. Students liked the content of stories read in class more by the end of the study. And, more students wanted to read at home. As a trained reading specialist, I was pleased to find materials that students liked to read. The more interest students have in reading materials, the more engaged they will be in class, the more content they will read, and therefore the more they will understand what they read. These are all goals for which classroom teachers strive when teaching students to read or conducting a Language Arts class.

A larger study in the future would allow for better data analysis using inferential statistics. Within a larger study, a method to track student attitudes more closely on surveys might be in place. Students did not put their names on their individual pre- and post-test surveys and as a result, I could not link the change in student attitudes to the CRRM program. In the future, I would make sure the student names were written on the top of the surveys before I handed them out to students to complete.

One story used in the study should not have been used, as the principal requested. She felt the suggestive overtones to the story would not be appropriate. My omission in editing it from the list of stories was simply an oversight on my part.

Implications for The Future

State of Alaska education officials, policy makers, and curriculum developers across the State of Alaska might consider the inclusion of culturally relevant materials into curricula of Alaska Native schools. From this study, we can see they would do no harm in doing so, but potentially would benefit Alaska Native student readers and their reading achievement. Hopefully, this study would open the door to State of Alaska, school district, and school administration officials to change the composition of reading materials included in reading programs for teaching reading, especially in Alaska Native community schools.

School administrators across the State of Alaska can embrace the culturally relevant reading materials for use with students in reading and language arts classes with the confidence that students will continue to grow in reading skills and abilities with the same opportunity they would have to do so if they used traditional, commercially packaged reading or language arts materials in classrooms.

Teachers of Alaska Native students would do well to consider the comments of the Local Cultural Experts (LCEs) in this study who created a backdrop for an ideal environment for teaching reading in Alaska Native village schools. More input from LCEs in communities where research studies are situated would help to craft a methodology that more genuinely reflected Alaska Native desires in teaching students to read and understand what they read.

As a first-time researcher, I would have been surprised if the study results showed significant differences in reading achievement for the students. The first time a new lesson plan is introduced into a classroom, there is always a chance it will not be successful, as experienced teachers know well. It takes repetition and practice to achieve success with new teaching methods, assuming it is well received by students. The students' attitudes in this study indicate they would accept a similar pedagogy that included culturally relevant materials in their

classrooms, which is a good platform upon which a teacher-researcher could conduct similar programs. Repeated, similar study programs, with culturally relevant materials, will help to confirm the results found here, if not improve upon them, as students get more practice with CRRM. The students in this study certainly show a positive attitude towards an attempt to improve their reading using culturally relevant materials in the future. Future research studies may include teacher training in the methods of the CRRM program that would be consistent across groups of students and schools who were included in such studies.

The results of this study are limited due to the lack of random sampling or random assignment of students. Also, only one community was used for this study, Chevak, and one teacher, myself. A larger study using more student readers, classrooms, schools, and Alaska Native communities would most likely provide better data for statistical analysis of results. A larger population of LCEs would provide more information from written interviews and therefore more insight into a grounded theory of an ideal pedagogy for teaching reading within an Alaska Native culture. More studies situated within Alaska Native communities, Cup'ik and others would provide invaluable information to this end.

A major implication for future research is further research and work with Cup'ik community members in the design of future studies. At least one parent mentioned on an informed consent form that she would participate if it were a Cup'ik research study. The input from the LCE was fairly small in this study, and a larger base of community ideology regarding reading and how it is taught in school would ground future studies to the local ecology. LCE input into the design of future studies would be beneficial to all. That is, more support from the LCEs would undoubtedly contribute to more positive results in future studies, as the attitude of respect for education, for teachers' unique teaching styles, and for parental involvement would help to build an environment for teaching reading that would be more conducive to student

success. With input from LCEs into the design of future research studies, a teacher-researcher could situate a study within an atmosphere of greater community support for the process and greater respect for the outcome of greater student achievement in reading. Undoubtedly, the Chevak community would welcome the opportunity to build their own conceptual framework for research studies in reading that would be meaningful to them. Such a framework would allow for a healthier, more positive, and more robust research methodology for all concerned. A broadcast of the respect for learning to read and to participate successfully on State standardized tests for reading that was communicated by the LCEs in this study would undoubtedly lead to further awareness, self-esteem, and pride for students learning to read using culturally relevant materials. As Klein (2017) reveals, in her recent article, Found in Translation, in *The Pennsylvania Gazette*,

Kayla Begay, a member of the Hoopa Valley Tribe in northern California, and assistant professor of Native American Studies at Humboldt State University, said that the finding confirmed what many Native Americans have long believed: Our overall health and wellness can be helped by returning to our culture and language. We've always known it. We've felt it. (p. 23)

As far as the Alaska Native peoples are concerned, the study results are consistent with Alaska Native authors' stated desire for curriculum materials to include culturally relevant content for use in teaching their own children to read. From the results of this study, students who read traditional stories written by Native authors can grow in reading achievement equally as well as students who read standard, commercially packaged reading materials from Western sources. The content of reading materials used, if it is Alaska Native traditional sources, will not compromise their opportunity to achieve in reading in school. And, it will not compromise student opportunities to show growth on school standardized testing.

To discuss future implications from the results of the study, Okakok (1989) provides,

Some of our greatest successes in the schooling process can be attributed to the fact that we take advantage of both the historical and contemporary culture of an area. (p. 417)

And further, that,

Above all, we must make certain that cultural differences in the way we view the goals and objectives of programs are addressed. We need to take as much care in choosing the system as we do in defining our goals. (p. 422)

Iluksik (2011) questioned many aspects of bringing the oral traditional knowledge into classrooms. The introduction of culturally relevant materials into reading classes in Alaska Native schools would satisfy Iluksik's vision for a place-based teaching, where teachers teach cultural themes in schools that are also taught at home by parents and shared among community members, knowledge and skills from "out where the mice make the highways in tundra" (p. 246).

As Martha Stackhouse (1996) has written,

If books were to be written about Alaska Native lifestyles, I believe it would greatly enhance the reading levels of student populations throughout our rural communities. Most student populations in the villages have reading levels far below the national reading level. If the books were more relevant, they may have more interest in reading. At the same time, they would pick up the cultural values that have been drastically falling in the modern world. They can become adults with contributions to the world and become responsible citizens. (p. 57)

Stackhouse, in Barnhardt & Kawagley, (1996) summarizes beautifully what my study hoped to

achieve, and underscored her conviction of Alaska Native studies curricula development, that Alaska Native studies are placed in our school curricula throughout our State.

(p. 60)

As the logical extension the immersion models described by John (2001) in *Sharing our Pathways*, CRRM in schools would take the next step to not only integrate Alaska Native authors' materials into reading class, they would substitute them for the Western materials dictated by current district curricular policy. The use of stories by Alaska Native authors, stories that came from their own cultural legends, increased the enjoyment of my students' participation in reading class. All of my students felt that Alaska Native cultural tales should be included in reading or language arts classes by the end of the study. This result in attitude shift among students definitely lends credence to Kawagley's theory that the basis of a "tetrahedral model" (Kawagley, 2006) forms the basis for

...infinite possibilities for solutions for overcoming a mechanical worldview that is so destructive to life, liberty, and the pursuit of happiness. (p. 2)

Learning to read well with culturally relevant materials will satisfy Kawagley's (2006)

...to know place is to know oneself, which empowers us to do things with courage and determination. (p. 2)

Undoubtedly, the pedagogy suggested in this study, CRRM, when used in future studies and classrooms, would serve as a 'decolonizing methodology,' (Smith, 2012) an agent of change for the way Alaska Native students learn to read. Government, district, and classroom leaders would help effect this change with use of CRRM in their state, schools, and classrooms. Alaska Native peoples have an open door – an opportunity to integrate culturally relevant materials into local school curricula, without harm to student academic achievement, and without fear of lowered scores on standardized tests. CRRM offers the ability to take self-determination to a new

level of implementation. Schools can be transformed to include culturally relevant materials selected according to place instead of purchased, expensive commercial programs. As a result, Alaska Native students can begin to enjoy what they read in school, a major factor in student success in reading. Expanded use of CRRM in Alaska Native schools means the continued enrichment of the educational experience for Alaska Native youth while it reintegrates their cultural identity.

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Appendix A
Letter of Approval from University of Fairbanks Institutional Review Board

 Institutional Review Board 909 N Koyukuk Dr. Suite 212, P.O. Box 757270, Fairbanks, Alaska 99775-7270	<p>(907) 474-7800 (907) 474-5444 fax uaf-irb@alaska.edu www.uaf.edu/irb</p>
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March 7, 2016

To: Beth Leonard, Ph.D.
Principal Investigator

From: University of Alaska Fairbanks IRB

Re: [857173-1] The Effect of Story Re Pro on Student Reading Comprehension

Thank you for submitting the New Project referenced below. The submission was handled by Expedited Review under the requirements of 45 CFR 46.110, which identifies the categories of research eligible for expedited review.

Title:	The Effect of Story Re Pro on Student Reading Comprehension
Received:	January 16, 2016
Expedited Category:	6 and 7
Action:	APPROVED
Effective Date:	March 7, 2016
Expiration Date:	March 7, 2017

This action is included on the April 6, 2016 IRB Agenda.

No changes may be made to this project without the prior review and approval of the IRB. This includes, but is not limited to, changes in research scope, research tools, consent documents, personnel, or record storage location.

- 1 -

Generated on IRBNet

Figure A.1. Letter of Approval from University of Fairbanks' Institutional Review Board.

Appendix B
Pre- and Post-Study Student Surveys
Pre-Study Student Survey

1. I enjoy reading class.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

2. I am motivated to take a reading class in school.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

3. I like the subject matter of the stories we read in class.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

4. I want to read at home after school.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

5. The Cup'ik culture is part of our reading class.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

Figure B.1. Pre-Study Student Survey

Appendix B (cont'd)
Post-Study Student Survey

1. I enjoy reading class.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

2. I am motivated to take a reading class in school.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

3. I liked the subject matter of the stories in the reading study.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

4. I want to read at home after school.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

5. The Cup'ik culture should be a greater part of our reading classes.

1	2	3	4	5
Agree	Agree Some	Disagree	Disagree Some	Strongly Disagree

Figure B.2. Post–Study Student Survey

Appendix C

An Example of Student Storyknifing

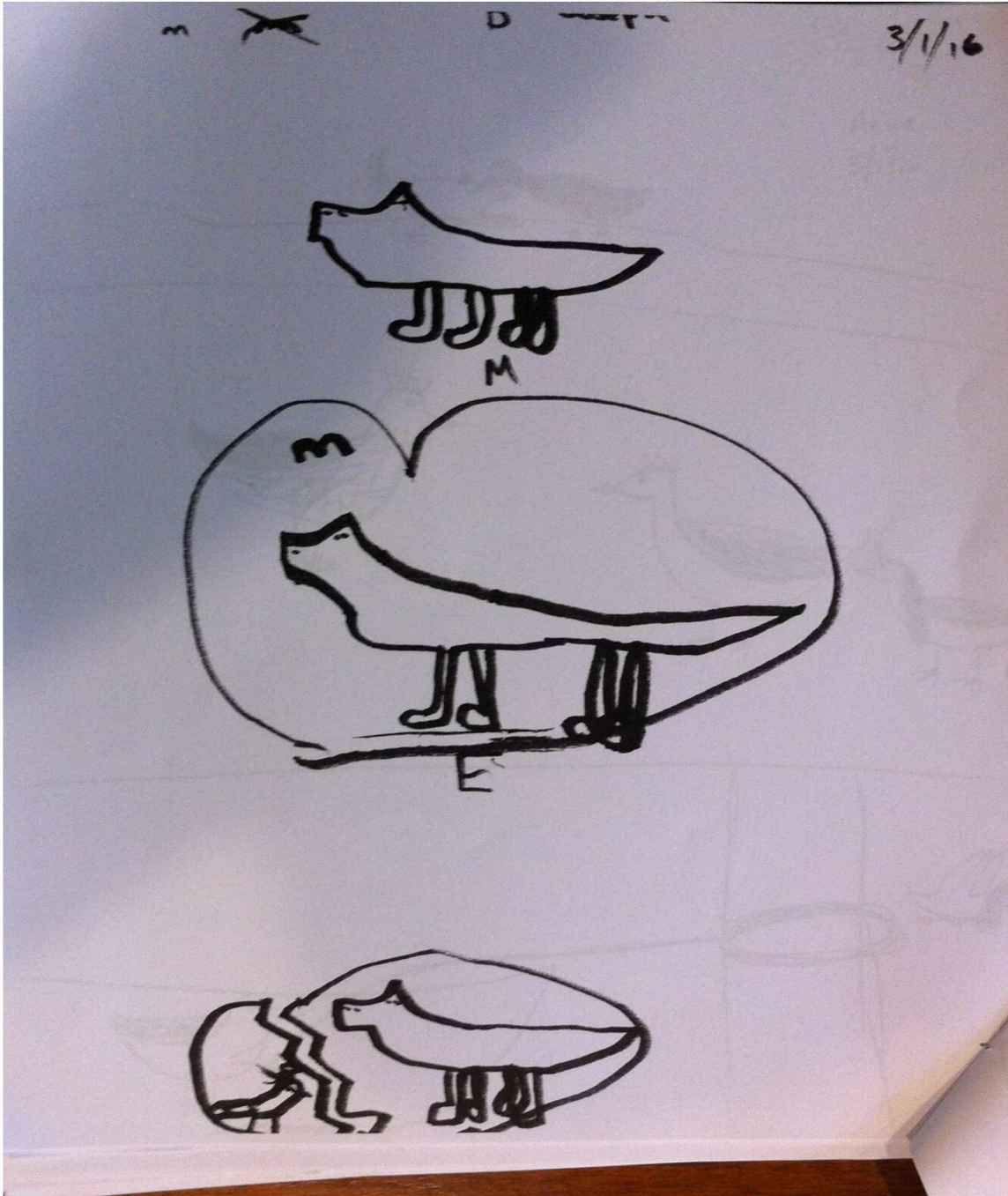


Figure C.1 An example of student storyknifing

Appendix D

Five Questions for Class Discussion

1. What is the story title and who is the author?
2. What is the main idea of the story?
3. Who are the main characters?
4. What is the problem in the story and how is it resolved?
5. What spiritual lesson can you take from the story?

Figure D.1 Five Questions for Class Discussion.

Appendix E
Fictitious Example of A Student Paragraph

Doby James

January 21, 2016

The title of the story is “Why Subsistence is a Matter of Survival: A Yup’ik Point of View”. The story’s author is John Active.

The main idea of the story is that our Cup’ik way of life is subsistence. We live from the land and the animals. We hunt and fish for our food.

The main characters in the story are Maggie Lind, Chimegalrea, and the fish.

The problem in the story is that our Cup’ik Elders feel that our culture is not being passed down to the young people, so that it will be lost. They feel we must do something to make sure the young people know about our ways of living.

The spiritual lesson I take from the story is that we must listen to our Elders and respect the animals as they tell us to do. The animals give us food and we don’t want to go hungry.

Figure E.1: Fictitious Example of A Student Paragraph.

Appendix F

Bar Graphs of Responses

Bar Graph of Responses to Question #1

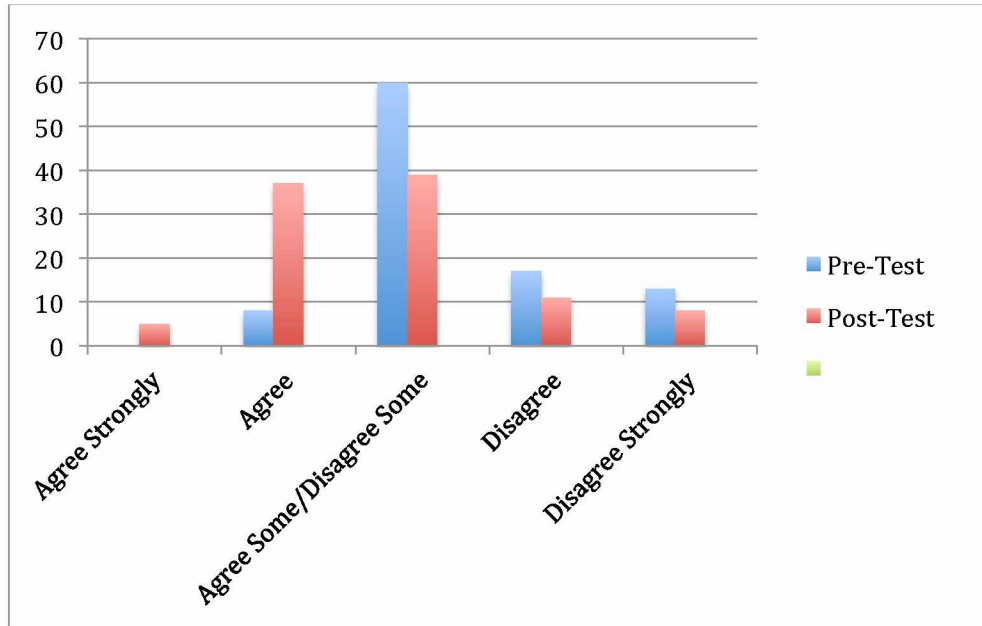


Figure F.1. Bar Graph results for Pre- and Post-Study Survey Question #1- I enjoy reading class.

Bar Graph of Responses to Question #2

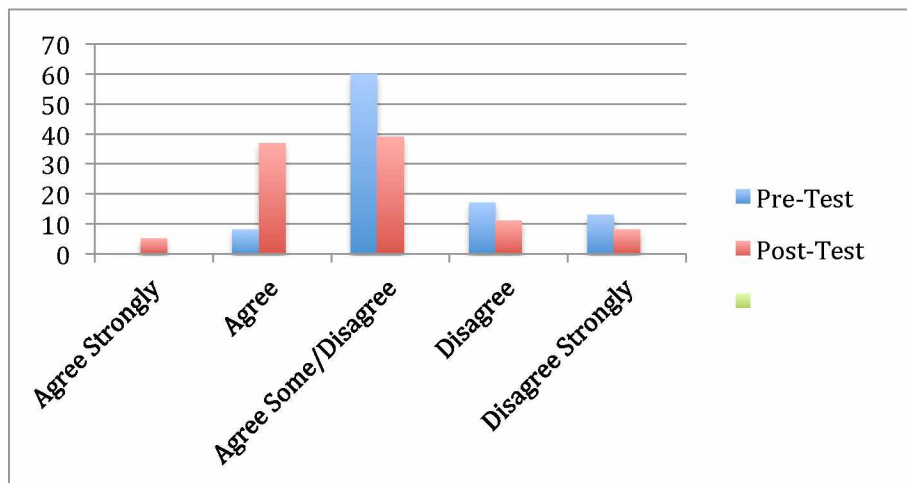


Figure F.2. Bar Graph results for Pre- and Post-Study Survey Question #2- I am motivated to take a reading class in school.

Appendix F (cont'd)

Bar Graph of Responses to Question #3

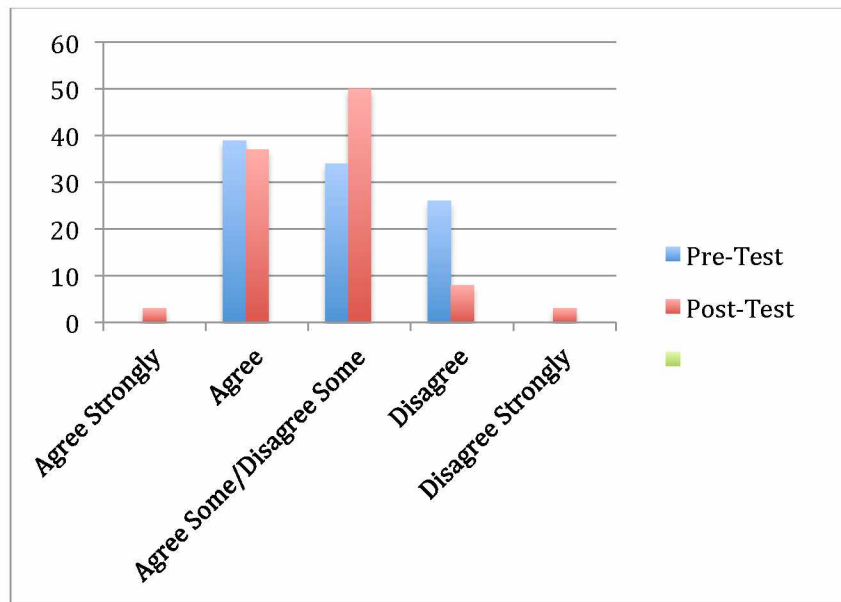


Figure F.3. Bar Graph results for Pre-and Post-Study Survey Question #3-I like the subject matter of the stories we read in class.

Bar Graph of Responses to Question #4

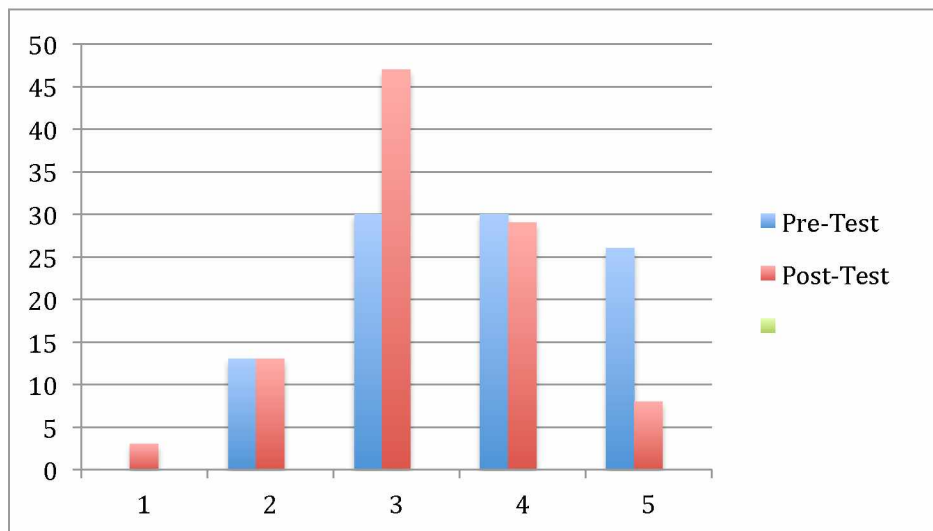


Figure F.4. Bar Graph results for Pre-and Post-Study Survey Question #4- I want to read at home after school.

Appendix F (cont'd)
Bar Graph of Responses to Question #5

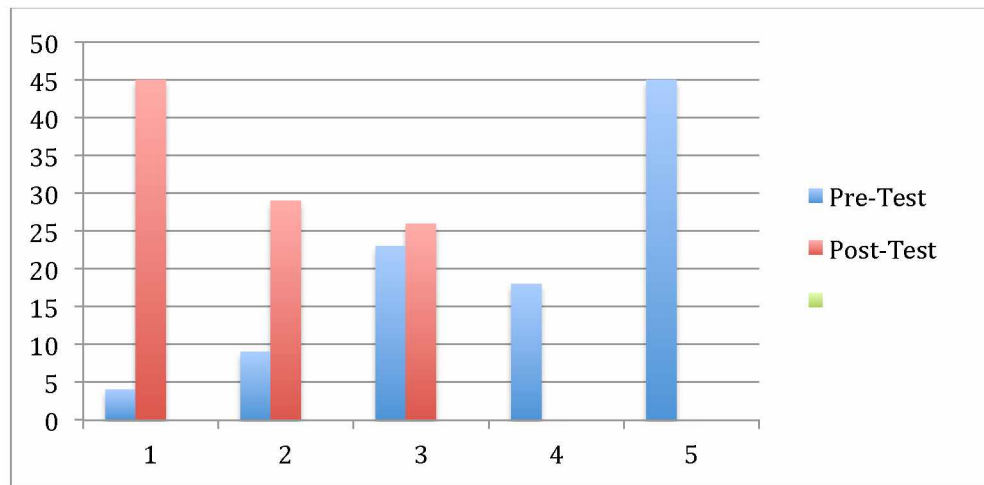


Figure F.5. Bar Graph results for Pre-and Post-Study Survey Question #5- The Cup'ik culture is part of (Post-Study Survey: should be part of) our reading class.

Appendix G

Questions on the Written Interview for Local Cultural Experts

Question #1: “From your Cup’ik cultural point of view, what elements of a story are important for students to take away from and reflect upon over time when they read a story in school?”

Question #2: “What role do Alaska State standardized tests in reading comprehension, like the Alaska Measures of Progress, play in teaching students to read well in your view?”

Question #3: “How do you feel that reading, as a skill for the 21st century for Cup’ik young people, should be taught in classrooms?”

Question #4: “What would be an ideal way, in your view, to teach students to read?”

Question #5: “How would you assess a student’s understanding about what they read?”

Figure G.1. Questions on the Written Interview for Local Cultural Experts.

Appendix H

Coding Scheme For Data Collected From CRRM Research Project

CV	Cup'ik Values
I	Making Inferences
M	Moral of the Story
PI	Parent Involvement
PO	Positive Outcome
R	Respect
RS	Reading Skills
RS-O	Reading Skills-Oral
RS-RT	Reading Skills –Retell
RS-W	Reading Skills-Written
T TRNG	Teacher Training
T BEL	Teacher Beliefs
TS	Thinking Skills

Figure H.1. Coding Scheme For Data Collected From CRRM Research Project.

Appendix I

Cup'ik Cultural Values from Alaska Native Knowledge Network

CUP'IK VALUES

As shared by the elders

- Help other people.
- Help with family chores and needs.
- Early to bed and early to rise.
- Provide time to see how your life is going.
- There's always time to play AFTER your work is done.
- Pingnatugyaraq: learn to do things yourself.
- Respect and honor your elders
- Always show good behavior
- Listen to all advice given to you.
- Remember what you are taught and told.
- Respect other peoples belongings.
- Respect the animals you catch for food.
- Gather knowledge and wisdom from the elders.
- Never give up in trying to do what you set your mind on.

Figure I.1: Cup'ik Cultural Values from Alaska Native Knowledge Network.

Appendix J
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<https://mail.yahoo.com/d/folders/1>

Subject: Re: Permission to use copyright

From: pas.licensing@pearson.com

To: bethgeiges@yahoo.com

Date: Monday, August 28, 2017, 8:18:08 AM AKDT

Dear Ms Geiges,

If that will be your only reference to AIMSweb then you need no further permission.

Thanks,

Bill Schryver

Please respond only to pas.licensing@pearson.com

On Sun, Aug 27, 2017 at 12:28 AM, Beth Geiges <bethgeiges@yahoo.com> wrote:

Mr. Schryer: In a previous email, you wrote:

"Dear Ms Geiges,

The AimsWeb copyright is: AIMSweb. Copyright (C) 2008 NCS Pearson Inc. Patent Pending. All rights reserved.

If this does not complete your request, provide additional comprehensive details to pas.licensing@pearson.com

Regards,

William H. Schryver
Senior Legal Licensing Specialist"

When I said AIMSweb phrasing in a previous email, I meant what you wrote: "The AimsWeb copyright is: AIMSweb. Copyright (C) 2008 NCS Pearson Inc. Patent Pending. All rights reserved."

I will use that phrasing that you provided when I give credit to Pearson in the Reference section of my dissertation.

I wonder if there is any other permission I need to obtain from you in order to use that phrase in my dissertation.

Please feel free to ask if you need further clarification.

1 of 3

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Figure J.1 Permission to Use Copyright: Pearson.

Appendix J (cont'd)
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Subject: Re: Copyright permission
From: Licensing, - (pas.licensing@pearson.com)
To: bethgeiges@yahoo.com;
Cc: esther.montemayor@pearson.com;
Date: Wednesday, July 12, 2017 1:40 PM

Dear Ms Geiges,

The AimsWeb copyright is: AIMSweb. Copyright (C) 2008 NCS Pearson Inc. Patent Pending. All rights reserved.

If this does not complete your request, provide additional comprehensive details to pas.licensing@pearson.com

Regards,

William H. Schryver
Senior Legal Licensing Specialist

Please respond only to pas.licensing@pearson.com

----- Forwarded message -----

From: **Beth Geiges** <bethgeiges@yahoo.com>
Date: Wed, Jul 12, 2017 at 2:23 PM
Subject: Copyright permission
To: "aimswebsupport@pearson.com" <aimswebsupport@pearson.com>

Hello:

Please send me a contact address where I might request permission to use Aimsweb copyright in my doctoral dissertation.

Many thanks,

Beth Geiges

Beth Geiges
PO Box 80872
Fairbanks, Alaska 99708
(907) 545-6162

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7/14/17 11:01 AM

Figure J.2 Permission to Use Copyright: Pearson.

Appendix J (cont'd)

Permission to Use Copyright: Alaska Quarterly Review

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File

Subject: Re: Your request
From: Alaska Quarterly Review (UAA_aqr@uaa.alaska.edu)
To: bethgeiges@yahoo.com;
Date: Friday, May 26, 2017 9:45 PM

Dear Beth--

1. You have permission to use the following creative works as part of your PhD study:

The stories that were used in the study are: 1) *Why Subsistence Is A Matter of Cultural Survival: A Yup'ik Point of View*, John Active (p. 182,) 2) *Lake Dwarves (told in Eyak)*, Michael E. Knauss (p. 7), 3) *Giant Rat*, Anna Nelson Harry (p. 9), 4) *Shag and the Raven*, Johnson & Lawrence (p. 21), 5) *Fish Story: Karta Bay (told in English)*, Victor Haldane (p. 18), 6) *Raven and the Mallard Girl (told in Gwich'in Athabaskan)*, John Fredson (p. 155), 7) *Speech for the Removal of Grief (spoken in Tlingit)*, Jessie Dalton (p. 34), 8) *Qulireq -Tale*, Leo Moses (p. 80), 9) *The Gambling Story*, Peter Kalifornsky (p. 143), and 10) *The Crow and The Mink (told in Yup'ik)*, Mary Worm (p. 89).

Please make full attribution for each of these works including how each is specifically acknowledged in ALASKA NATIVE WRITERS, STORYTELLERS & ORATORS: THE EXPANDED EDITION.

2. Yes, we are willing to donate 25 copies of ALASKA NATIVE WRITERS, STORYTELLERS & ORATORS: THE EXPANDED EDITION for use in school language arts classrooms at Chevak School. Please e-mail me information about who I should contact at Chevak School.

All best,
Ronald Spatz, Editor
Alaska Quarterly Review
University of Alaska Anchorage
3211 Providence Drive (208 ESH)
Anchorage, AK 99508

From: Beth Geiges <bethgeiges@yahoo.com>
Sent: Friday, May 26, 2017 7:56 PM
To: Alaska Quarterly Review
Subject: Re: Your request

To Editor Spatz:

Many thanks for your prompt response. The stories from AQR that are included in my study are:

They were selected from the *Alaska Quarterly Review (AQR)* (Spatz, Breinig, & Partnow, 2001). The stories that were used in the study are: 1) *Why Subsistence Is A Matter of Cultural Survival: A Yup'ik Point of View*, John Active (p. 182,) 2) *Lake Dwarves (told in Eyak)*, Michael E. Knauss (p. 7), 3) *Giant Rat*, Anna Nelson Harry (p. 9), 4) *Shag and the Raven*, Johnson & Lawrence (p. 21), 5) *Fish Story: Karta Bay (told in English)*, Victor

1 of 3

5/27/17 11:38 AM

Figure J.3 Permission to Use Copyright: Alaska Quarterly Review.

Appendix J (cont'd)
Permission to Use Copyright: Fejes Family

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Subject: Re: Permission to use copyrighted picture

From: info@thealaskahouse.com

To: bethgeiges@yahoo.com

Date: Tuesday, October 3, 2017, 1:46:16 PM AKDT

Dear Beth,
Thank you for contacting me about using the image "Snow Writing".
I am happy to let you use it for your presentation.

Please add somewhere:
"Snow Writing" by Claire Fejes
used with permission by the Fejes Family, copyright 2017

(All the copyrights are updated yearly)

Please consider this email formal permission
for the use you mentioned in your email below.

Good luck on your project.

Best regards,
Yolande Fejes

The Alaska House Art Gallery
1003 Cushman Street
Fairbanks, Alaska 99701
907.456.6449
<http://www.thealaskahouse.com>

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10/3/17 7:05 PM

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Subject: Re: Your letter dated 09/07 to CTC

From: bethgeiges@yahoo.com

To: chevaktc@gmail.com

Date: Wednesday, September 13, 2017, 10:05:44 AM AKDT

Quyana, Samson, so much for such good news! I look forward to sending my report to Chevak.
Beth Geiges

Beth Geiges
PO Box 80872
Fairbanks, Alaska 99708
(907) 545-6162

On Wed, 9/13/17, Chevak Traditional Council <chevaktc@gmail.com> wrote:

Subject: Your letter dated 09/07 to CTC

To: bethgeiges@yahoo.com

Date: Wednesday, September 13, 2017, 9:01 AM

Good morning

Beth, I have wonderful news from the CTC board as they had their meeting last evening and they all granted you permission to use the Atlas. I will send out the signed Permission granted letter today. We look forward to the promising results. Samson
Matchian Interim Tribal

Administrator | Chevak Traditional Council P. O. Box 140

| Chevak, Alaska 99563 Phone: 907.858.7428 | Fax: 907.858.7812 Email: chevaktc@gmail.com

1 of 1

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Figure J.5 Permission to Use Copyright: Chevak Traditional Council.

